Clinical Retrospect
OF A
HALF-YEAR'S HOSPITAL WORK.

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[In his concluding lecture to his class at Anderson College, Dr. Charteris gave a summary of the work at the Royal Infirmary during the winter session of 1879-80. The accompanying report, as revised by Dr. Charteris, is supplied from the notes taken by Mr. G. W. Till, resident surgeon to the Kidderminster Infirmary.]

Commencing with the subject of fever, Dr. Charteris said he had had one example of simple febricula, in which, after a couple of days of high temperature of 103°, and without any chest complications, a crisis occurred, followed by a copious perspiration and a normal temperature.

One case was admitted simply with fever, frontal headache, and a history of a distinct rigor. The patient, a woman aged thirty, was under observation for two days. The morning and evening temperature was respectively 103° and 103·6°. There was no diarrhœa, no tenderness over the iliac region. Two days after her admission, presumably on the fifth day from the rigor, the characteristic dark-mottled eruption of typhus appeared on the body; and after it had been observed by the clinical clerks and others the patient was removed to Belvedere, and made a good recovery.

Two cases of typhoid fever were treated during the winter, both being males. The characteristic rose-coloured spots were apparent about the tenth day of the fever, lasting for the normal period of three days, to be succeeded by others. The clinical clerk in charge of the case marked them round with ink, so that the class might have an opportunity of observing the features and duration of the eruption. The treatment was based on the pathology of the disease, and consisted of a careful attention to diet. Milk was the only thing given until the temperature became normal in the morning, when it was supplemented by beef-tea and toast and water. The highest temperature marked was 104°. Hobson's charts, lately published, were found very beneficial in giving an accurate estimate of the progress of the fever, and they can be cordially recommended to all hospital physicians. Both cases made a satisfactory recovery.

One case of scarlet fever came under observation. It was admitted as a case of bronchitis, but on the appearance of the eruption on the second day the girl was at once removed to the Fever Hospital, such cases never being retained in our public infirmary.

There were sixteen cases of dropsy, which were classified under cardiac, renal, and hepatic, according to the organ chiefly implicated. Of these, one cardiac case, two hepatic, and one renal, died. The others so far improved as to be able to leave the hospital. Three of the renal cases being, if the expression may be used, cured. One of the renal cases was complicated with renal convulsions, and it was found that the injection of digitaline was attended with great benefit. In all the renal cases the quantity of urea was measured daily by means of the ureameter, and it was found that the injection was attended with an increased quantity of urea in a very short time. Dr. Charteris said he considered the knowledge obtained by this easily-worked instrument invaluable, more so than even the daily estimate of the albumen. The general treatment of the renal cases consisted in hot-air or modified Turkish baths, according to an apparatus constructed by Dr. Whittaker, and at the same time the administration of compound jalap powder on alternate nights. Dialysed iron was found very serviceable, and did not appear to cause headache—a result often apparent when iron is given in its usual form of the perchloride.

The treatment in the cardiac and hepatic cases was entirely symptomatic. Southey's needles were in these cases inserted. In one they occasioned erysipelas of the leg. This was attributed to the needles being inserted without their previously puncturing boracic lint.

A case of syphilis, the only one admitted during the winter, was treated by a mixture of the perchloride of mercury, iodide of potassium, and chloride of ammonium. The chief advantage of this treatment in well-marked secondary eruptions is the length of time the mercury can be administered beneficially without causing salivation.

Eight cases of acute rheumatic fever came under observation, and six of chronic. The acute cases were all treated with salicin in twenty-grain doses every two hours, with invariably satisfactory results. In all the cases the patient was free from pain in twenty-four hours, and the temperature was normal in forty-eight. When this result had been attained the salicin was given in smaller doses, by twenty-grains every four hours for the first day, and afterwards the same quantity every six hours for two days, when it was stopped and a tonic administered. Dr. Charteris mentioned that he had invariably followed this line of practice for the last four years, and said he could not speak too highly of the remedy. He said he had never known it to cause delirium, or weakening of the heart's action. On the contrary, the relief was marvellous, and the recovery materially hastened. On an average the patient was able to leave the bed within seven days after admission, and no other treatment he had tried could give any result at all to be compared with this. In former years he had tried for comparison the salicylate of soda, but it caused temporary deafness, headache, and insomnia, and he had latterly entirely abandoned it, being more than satisfied with the action of salicin.

Six cases of chronic rheumatism were treated variously. Salicin was found, however, to have no beneficial effect in these.

One case of purpura in its hæmorrhagic form died, but no post-mortem was obtained.

A case of scurvy in a sailor, after a long and arduous voyage, made a good recovery. The hard, board-like induration of the legs and the looseness of the teeth, with the spongy condition of the gums, rendered the diagnosis easy. This man stated that lime-juice was, in the merchant service, carelessly administered, and frequently never taken. He said that there was a common impression among sailors that lime-juice destroyed virility, and he attributed much of Jack's antipathy to it to this idea.

A case of chlorosis and another of anæmia made good recoveries under iron and a nourishing diet.

Only one case of idiopathic erysipelas was admitted, and the perchloride of iron was given in large doses, with the usual satisfactory result.

Diphtheria in a man aged thirty was watched with interest. The fauces were found to be sloughy, the pulse feeble, and the prostration great. The man was placed in a side ward, and inhaled steam constantly from a kettle placed on the hob of a fireplace. Poultices were also applied externally, and iron given with quinine. He made a good recovery, but subsequently was attacked with dropsy, commencing in the abdomen and latterly extending to the extremities. No remedy seemed of any use, and he died three months after admission. At the post-mortem the liver was found to be hobnailed and contracted. The spleen weighed as much as the liver. The kidneys were healthy.

One patient died from laryngitis. Another made a satisfactory recovery. This latter case was interesting, as the symptoms were so grave, the dyspnœa so excessive, and the mal-aeration of the blood so intense, that it was deemed advisable to perform tracheotomy. Acting, however, on the advice of Dr. Eben. Watson, this was postponed, and palliative remedies, notably the inhalation of steam, were put in force. The case progressed favourably, although the dyspnœa was at times very alarming. The patient had an ulcerated sore-throat, and the laryngitis seemed to have originated simply from exposure to cold.

Seven cases of acute bronchitis were treated successfully by antimonial wine for the first twenty-four hours in large doses. This medicine had, as in former years, the effect of promoting expectoration, lowering the fever, and causing profuse diaphoresis. At the same time stimulants were

given as required to meet the attendant weakness, their use being regulated by their action on the circulation. Hot linseed poultices were also applied. At the expiration of the term mentioned, and provided other circumstances warranted it, the antimony was given at an extended interval of time, simply as an expectorant, combined with ipecacuanha wine or carbonate of ammonia.

Twenty-six cases of chronic bronchitis and emphysema were relieved by the usual methods of treatment.

Stramonium cigarettes did good after other means failed in the only case of asthma admitted into the wards.

Of fifteen cases of acute pneumonia, two died in the first twenty-four hours after admission, one on the ninth day, the others made a satisfactory recovery. A similar line of treatment was adopted to that mentioned in acute bronchitis, and Dr. Charteris said he believed that in the main the most favourable result would accrue from its adoption. In four of the cases marked benefit followed the application of twelve leeches to the side affected. There could be no doubt the lividity and other alarming symptoms disappeared *pari passu* with the loss of blood. The bleeding on the removal of the leeches was promoted by hot cloths and poultices.

There were seven cases of pleurisy. In two of these empyema was well marked on admission, and it was singular and instructive to note the methods by which the pus was evacuated. In one case, a man aged twenty-four, there was distinct fluctuation and pointing at the junction of the third rib with the sternum. It was resolved to give the man a day's rest and then aspirate. On the visit the following morning he stated "that during the night he felt something give way in his inside, and this was followed by a choking sensation in his throat, and subsequently by the expectoration of a large quantity of purulent matter." On examination it was found that the skin was much less tense over the site mentioned, and it was deemed advisable not to interfere with nature's processes, but to assist these. Pressure by means of a broad elastic band was used over the side, with the view of preventing the lodging of pus in the sac, and at the same time strict rest and nourishing diet were enjoined. Notwithstanding this, on three different occasions at varying intervals the pus reaccumulated, and was expectorated in a similar manner. The man made a good recovery, and is now following his employment as a nurseryman.

The second case had been aspirated twice by the medical man in attendance, and the patient, a young lad of sixteen, was sent to the hospital as a *dernier ressort*. The patient was very exhausted. The right pleura seemed full of fluid. The liver was pushed down, the intercostal spaces bulged out, and the difference of measurement on the two sides was nearly an inch. As death seemed imminent, a free incision with a bistoury was made in the axillary line, where the skin seemed tensest. There was a copious spouting out of pus at first, succeeded by a more steady flow, to the extent of three pints and a half. The operation was performed under strict antiseptic precautions. A drainage-tube was inserted into the wound and a bandage applied over carbolic-acid gauze dressing. Considerable cough and irritation followed the operation, and the pulse was remarkably feeble. Brandy was given in large quantities, the patient taking nearly a bottle per diem, along with three pints of strong beef-tea. For the first fortnight a carbolic-acid solution was syringed into the wound, and the patient by a series of coughs expelled this through the tube. At the expiration of the fortnight the syringing was only done on alternate days. A satisfactory recovery was completed three months after the operation by the removal of the tube, and the patient is now able to move about freely. Hypophosphite of lime and malt extract were the only medicines given. Large quantities of stimulants were administered during the progress of the case, and without these no recovery could by any possibility have taken place.

Thirty-seven cases of phthisis were admitted in various stages of the disease. Of these five died, and in the others some improvement was manifested, or the disease seemed to remain *in statu quo*. Dr. Charteris said he considered a hospital ward the worst place possible for a phthisical patient in the winter, as the whole surroundings were depressing, and one essential part of the treatment—viz., going out of doors—almost impossible. Dr. Charteris said he had increasing confidence in the hypophosphites as the best remedial measures for phthisis in its early stages.

(To be continued.)

Lettsomian Lectures

ON

THE TREATMENT OF STRICTURE OF THE URETHRA, ENLARGED PROSTATE, AND STONE IN THE BLADDER,

WITH SPECIAL REFERENCE TO RECENT PROGRESS.

Delivered at the Medical Society of London, February, 1880.

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LECTURE III.—PART II.

THE symptoms of stone in the bladder are often very slight and entirely masked by the existence of some chronic irritation with an enlarged prostate, so that on several occasions I have detected calculi in patients who had been treated for cystitis for months and even years. If the act of micturition is associated with pain and blood, and if both be increased by exercise, *there must be a stone*. On the other hand, a calculus may give no evidence of its presence beyond a slight smarting in the urethra. There is no difficulty in finding a large stone, but small calculi are often missed by badly-shaped sounds. The shorter the beak of a sound and the more it approximates to a right angle with the shaft, the more efficient will it be. I consider Mercier's sound (Fig. 11, A), with Sir H. Thompson's cylindrical handle, to be

FIG. 11.

the very best. When the instrument touches a small stone, the two bodies are in contact at points only, for they are both convex, hence the click is very faint, and there is always a tendency for the sound to push away the little calculus. For obviating this and more easily detecting small stones, Mercier devised a hollow sound with a flattened spoon-shaped beak (Fig. 11, B), the concavity of which overlaps the convex surface of the calculus, and as the two opposing bodies have *surfaces* in contact instead of *points* only, a louder note is elicited. I prefer to examine a patient when his bladder is quite empty, for there is no trouble in finding a large stone, whether the viscus be full or not; but if the calculus be small and the vesical cavity full, the surgeon may make a prolonged examination and yet fail to strike the particular spot where the stone lies. When, however, the bladder is empty, a small calculus is brought to its

very neck, and is struck by the sound as it enters. Text-books omit to point out that things *extravesical* as well as *intravesical* may be felt with a sound—the sacrum can always be touched, and very often the spine of each ischium. For a want of this knowledge the bladder has been cut into on several occasions, and, to the great mortification of the operator, no calculus found.

When a stone is found, what is to be done with it? In the present state of our knowledge and experience I regard the use of solvents as so much valuable time wasted. Unfortunately, a calculus is too often treated as such, whether it originated in the kidney or bladder, and stones of equal dimensions, whether renal or vesical, are dealt with in a similar manner. I look upon the treatment of a stone which has formed in the bladder to be different from one which originated in the kidney and descended into the bladder, and the want of discrimination on this point has led to many disappointing results after operation. In one case the calculus is the *cause* of all the trouble; in the other it is merely a *result*. Take a man with a lithic-acid stone which is giving him much pain. What are the facts of the case? The calculus descended from the kidney, and until it entered the bladder that organ was healthy and quiet; the bladder, however, finds that it has a very unpleasant guest, and becomes irritated. Get rid of the intruder and the bladder will quickly resume the even tenour of its way. Not so, however, is the case with the phosphatic stone formed in it. Long before the calculus existed the bladder was in a state of chronic inflammation, the urine was muco-purulent, and the patient could probably only empty his bladder with a catheter. In such a case the stone formed as a matter of course, but it was entirely secondary to the vesical condition, and if removed leaves the patient but little better off, for the aches and pains will persist, the urine will not clear up, and a fresh concretion will rapidly form. If the calculus be of renal origin it ought always to be crushed in the adult, if not too large. In the present state of our knowledge and experience, enlarged and improved as it is by the introduction of Bigelow's operation, it may be said that any stone up to two inches in diameter may be crushed, Bigelow's operation has entirely revolutionised the treatment of stone in the bladder: it is a *new* operation. The principles upon which it is founded are as widely opposed to those upon which ordinary lithotrity was established as are the two poles to each other. The old method was sometimes spread over a period of months, the new one is the work of a certain number of minutes; and in this respect resembles lithotomy, the advocates of which operation used to urge that one of its great advantages was that, unlike lithotrity, it rid the patient at once of his trouble. Now this is exactly what Bigelow's operation does. The bladder frets for a few hours at the great liberties taken with it, but not finding any enemy to fight with it rapidly resumes its former wonted quiet. The rule hitherto has been to do as little as possible at the first sitting—feel your way, see how much interference the bladder will tolerate, and, above all, do not let your lithotrite remain in longer than a couple of minutes; leave the fragments to nature to get rid of—unless indeed she cannot do so, in which case you must wash them out, a process "which is quite as irritating as a crushing with the lithotrite." Bigelow says exactly the opposite—do everything at once and for all, however long it may take you to do—leave nothing to nature to expel; remove it all. But it may be said that surgeons performed lithotrity at one sitting and removed fragments before Bigelow's time. Most certainly they did, but they operated on the same principle whether they removed a calculus in one sitting or twenty; and all cases of lithotrity at one sitting were so performed because, as Curtis has pointed out, "a second sitting was an impossibility."

Then, again, the means the older lithotritists adopted to remove fragments or débris were looked upon as more objectionable than the evil they sought to obviate, of leaving the pieces of stone behind. In 1846 Heurteloup wrote a work on "Lithotripsie sans fragments au moyen de deux procédés de l'extraction immédiate, ou de la pulvérisation immédiate des pierres vésicales par les voies naturelles." He named his process "Lithocenosis" (stone evacuation). Of 124 cases of lithotrity, 69 were performed by him at one sitting.

In 1853 Amussat published a "Mémoire sur la Lithotritie en une seule Séance," and in our own time Sir W. Fergusson was a great advocate for removing fragments with the lithotrite. That these great surgeons did all this detracts nothing from the value of Bigelow's discovery. Cornay of Rochfort was the first to introduce aspiration into practice in 1843, and he originated the truncated catheter. Next came Sir Philip Crampton, then Mercier, then Clover, and lastly Bigelow. It is only just to say that Dr. E. M. Moore, an American, very nearly anticipated Bigelow in his discovery. Up to Bigelow's time aspiration was only partially successful, for two reasons—the small calibre of the evacuating catheter, which only permitted little particles to escape, and the weakness of the india-rubber bottle. Bigelow has made aspiration perfect, but he probably would not have succeeded had it not been for Otis, who demonstrated what large catheters could be introduced into the bladder. *But even if we had possessed Bigelow's perfect instruments, we should not have dared to perform his operation if he had not shown us the great amount of instrumental interference the bladder will tolerate if we only take care to remove all the fragments at once.* This is the grand point, and to Bigelow solely belongs the great merit of the discovery. I consider that his operation will prove an inestimable boon to mankind; it will save life by bringing within the fold of lithotrity a large number of cases which otherwise would have been submitted to the knife with a correspondingly increased risk; it will rob lithotrity of its peril to life in old men who formerly were often worn out by the cystitis set up by the frequent crushings, and it will take from lithotrity the opprobrium that it often removed the stone, but failed to cure the patient. All the aspirators now in use, Clover's excepted, are unconscious copies of Mercier's, whose aspirator (see Fig. 11, C) consisted of an india-rubber bottle, fitted with a brass tube and stopcock to fix on to the evacuating catheter, and a glass receiver for the fragments to fall into. The original one made by Charrière upwards of twenty years ago is now in the possession of Gouley, who has recently recorded a case in which he used it successfully. Bigelow's aspirator, with the stopcock restored to it by me, is seen at Fig. 11, D. Let us see what are the differences between the two. When Bigelow's aspirator arrived in this country it had no stopcock like Mercier's, which was, I think, a great mistake, for air entered the bladder, got churned up with the water, and caused much annoyance. At first I used to put a cork into the india-rubber tube after filling it to the very brim, but in spite of this I found that air would always enter the evacuating catheter during the process of adjusting the two tubes. I accordingly restored Mercier's stopcock, and have experienced no further annoyance. The great improvement in Bigelow's aspirator above all others consists in placing a long piece of india-rubber tubing between the bottle and the evacuating tube. Everywhere we see art imitating nature in placing pads, springs, or buffers between bodies which would otherwise be brought into rude contact, and to fix an aspirator directly on to a rigid tube without an intervening medium to damp the concussion is contrary to all the laws of mechanics, for the shock which takes place each time the bottle is squeezed is transmitted unimpaired to the metal catheter. Then, again, the india-rubber tube acts as a syphon when the aspirator is at work, so that there are two forces in operation. An objection has been made to it that its length diminishes the power of the aspirator; it is, however, purely theoretical, for evacuation, as performed by Bigelow's aspirator, is simply perfect. The glass-receiver, which in Mercier's is fixed, takes off and on in Bigelow's, which is another improvement, and as it is made longer and narrower the fragments cannot escape when once they have dropped in. To English surgeons Bigelow's lithotrite seems somewhat cumbersome, except for breaking up large stones. Until six years ago Civiale's lithotrite was almost universally employed here. Sir H. Thompson improved it by adding to it his cylindrical handle and particular mechanism for fixing the blades. The three special points in Civiale's instrument were—(1) the jaws were placed at a very oblique angle to the shaft; (2) the male blade had no spur; (3) the female blade had only a small pinhole for the ejection of débris. Mercier condemned Civiale's lithotrite, and said it was "l'un de plus mauvais," and his verdict has been fully justified by the accidents which have occurred to lithotrites made on Civiale's principles. These were due to the vicious lines on which they were built. As the jaws were placed so obliquely to the shaft there was much loss of crushing power, for the body of the male blade could not be brought well home to the stone which it crushed with its tip, and as it had no spur it sometimes broke at its weakest part—the angle. Then, again, the female blade had only a

pinhole for the escape of débris, so that the instrument was liable to become "packed" and incarcerated in the bladder. Six years ago, in THE LANCET, I introduced Mercier's lithotrite to the notice of the profession, with a special mechanism of my own for fixing the blades. The three great points on which it is constructed are—(1) the male blade is fixed as nearly as possible at a right angle to its shaft, thus obtaining great crushing power; (2) the male blade is strengthened at its angle by a spur or prow, which also drives out the débris and prevents "packing"; (3) there is a large opening in the female blade for the escape of débris and the reception of the spur. All these principles have been adopted by Sir H. Thompson in the construction of what he calls his "new lithotrite." Figures C and A in woodcut 12 respectively represent Mercier's and Civiale's

FIG. 12.

lithotrites. Compare the oblique angle at which Civiale's male blade (B) is set to its shaft with the almost right angle of Mercier's (D). Compare the spur (E) at the base of Mercier's male blade with its absence in Civiale's. Compare the pinhole in the female blade (A) of Civiale's with the large opening (C) in that of Mercier's. Bigelow prefers his straight evacuating catheter to the curved one. To obviate the difficulty there sometimes is in introducing the former Gouley has fixed a Mercier's beak to it. It appears to me that the curved tube has one advantage which has been overlooked—viz., that the beak keeps the mucous membrane from falling over the hole and obstructing the ingress of the fragments. The old operation of lithotrity will now only be required for small calculi, which can be pulverised in a few minutes, and for which aspiration would be unnecessary. Lithotomy will only be demanded for very large, hard stones; big, soft calculi can be most safely disposed of by lithotrity and external urethrotomy at one sitting.

What are the conditions which bar lithotrity, enlarged as it now is, in its scope by Bigelow's operation? *Boys* will continue as heretofore to be submitted to lithotomy, for their parts are much too undeveloped to allow of the application of Bigelow's procedure, even if it were desirable; but *women* are admirably adapted for his operation, for in them the urethra is short, straight, and capacious. In *men* the only condition to preclude crushing is that contracted condition of the bladder which occasionally exists and interferes with the manipulation of the lithotrite. A strictured urethra can be restored to its normal calibre, and an enlarged prostate can usually be surmounted. No kind or amount of renal disease forbids Bigelow's operation if the patient be physically fit for it. In those cases where the diseased bladder is the cause, and not the result of the stone, I am afraid that his method will no more prove a success than did ordinary lithotrity. In the four instances of lithic-acid calculi in which I performed Bigelow's operation the results were admirable, but in the case of a phosphatic stone of local formation, entirely secondary to a diseased bladder, requiring the use of a catheter, it removed the calculus, but failed to cure the patient. In a recent clinical lecture at the Bellevue Hospital, Gouley has pointed out that surgeons will be mistaken if they suppose anæsthesia and aspiration have rendered lithotrity easier to perform, and that it will, on the contrary, now more than ever demand the utmost care and delicate skill. Very recently Keyes of New York has collected the results of 107 cases of Bigelow's operation performed by English and American surgeons with but six deaths. Nothing could be more satisfactory, and the success achieved far surpasses the results obtained by any other method.

Lithotomy will now only be required in adults for very large hard calculi. For stones up to three ounces in weight lateral lithotomy is an admirable operation, and although much larger calculi have been removed by it, the rectum was usually cut or torn. I consider that the introduction of Bigelow's operation will bring to the front those other forms of lithotomy which have rarely been practised of recent years. I have a personal experience of everyone of them save the supra-pubic. The bilateral is specially adapted for those stones which are rather too large for the lateral method, for it gives as much room as two laterals. The recto-vesical is well devised for enormous calculi or debilitated subjects, for it can be performed with the minimum amount of cutting and loss of blood, and it affords the greatest amount of space. The extraction of a calculus by it closely resembles the removal of a child with the forceps, for in each instance the presenting body passes through the centre, where there is the most room. Two objections are urged against this operation. It is said the peritoneum may be wounded and that a urethro-rectal fistula may remain. The former may be avoided by making lateral incisions through the prostate instead of a vertical one, and a fistula is not necessarily incurable. According to Dulles' statistics the results of the suprapubic operation for stones above two ounces in weight were far more favourable than those of lateral lithotomy. The operation is specially indicated for large calculi in men who, on account of their enlarged prostates, are obliged to use the catheter, for a small aperture might be kept permanently open for the instrument. Median lithotomy will only be required for large hard calculi which have been "fragmented." In extracting a calculus in lithotomy the surgeon has the choice of removing it by cutting or laceration, for there is no such thing as dilatation of the prostate, as was long ago proved by Professor Ellis. Many years ago I carried out a series of investigations on this point and submitted the results to the Pathological Society, which proved that the normal calibre of the prostatic urethra was much larger than had been supposed, but that it could no more be exceeded than the calibre of any other portion of the canal. I further ascertained from my experiments and from an examination of all specimens of parts after lithotomy in the London museums, that a stone not more than 60 mm. in circumference could be extracted through a non-incised prostatic urethra without laceration. The extreme normal calibre of the prostatic urethra may be regarded as from 50 mm. to 60 mm., and in old men it is often greater. This is an important anatomical fact, for it enables us to take advantage of it and utilise it for breaking up large soft stones and extracting the fragments by external urethrotomy, and so avoiding the severer operation of lithotomy. The examinations made on twelve fatal cases of lithotomy occurring in the practice of one of the most distinguished British surgeons deceased, who professed to extract calculi by a limited incision and dilatation, showed that in every instance the prostate had been ruptured. To prove that the division of the prostate and its capsule is not followed by a fatal result, I need only refer to the twenty-two boys whom I have cut by the lateral method, everyone of whom recovered, notwithstanding the fact that the breadth of my knife exceeded the diameter of the lateral half of the prostate in each instance. The most successful lithotomists were probably Brett, Martineau, and Gutteridge, and the peculiarity in their method was that they used no force when extracting calculi, preferring to enlarge the incision if necessary rather than tear out the stone through an insufficient opening. The fewer the instruments used in lithotomy the better. For boys I employ, as a rule, only a staff and a knife, extracting the calculus with my finger. If, on account of the enlargement of the prostate, the depth of the perineum, or the shortness of his finger, the surgeon is unable to reach the bladder, he uses a gorget. Now, if the probe point on the gorget be transferred to one of the blades of the forceps, as seen at Fig. 11, E, the surgeon can slide the instrument along the groove of the staff into the bladder with unerring certainty. This slight modification of mine renders the gorget unnecessary, and so one less instrument is required. I have given up using the sharp-pointed knife for making the internal incision in men since Mr. Gutteridge convinced me of the risk attending its employment, for if it should slip from the staff, the posterior wall of the bladder will most likely be pierced, and the patient killed by peritonitis. Had the deaths which have occurred after operations through the above accident been published, the sharp-pointed knife would long ago have received its *congé*. In boys it is a choice of evils, for if the surgeon change his knife, he may not be able to introduce the probe-pointed one, and if he fail, he may push the yielding tissues before him, and rupture the urethra. I consequently still use a sharp-pointed knife for them, with a short broad blade, and, by holding it short, lessen the chance of doing mischief if it

should slip. I prefer Mr. Jonathan Hutchinson's rectangular catheter staff to any other. It has two great advantages. The surgeon can determine if the instrument is in the bladder or not, whether he strike the stone or not, for a short-beaked sound may touch a stone when a staff cannot. Then, again, it gives a straight road into the bladder instead of a crooked one, and so the chances of the knife slipping are reduced to *nil*. No tube or plug of any kind ought, I think, if possible, to be retained in the bladder after the operation, for however large a tube may be, it will not allow clots to escape, and if they cannot, they give rise to straining and cause bleeding or prevent its arrest. By leaving the wound open the surgeon sees what hæmorrhage may take place, for cases have occurred of fatal bleeding into the bladder when the wound was plugged. Then, again, the retention of clots which are rapidly decomposed by the urine in a few hours is a likely source of blood-poisoning. If hæmorrhage should occur, the best way to arrest it is to apply an ice-bag above the pubes, and insert pieces of ice in the wound and rectum.

In the treatment of stone in the bladder when it occurs as a local formation secondary to the diseased bladder, of which it was not the *cause*, but the *result*, the following pathological facts must be borne in mind:—Firstly, the condition of the bladder is such that, even if the calculus be completely removed by crushing and aspiration, some local irritation will remain, the alkalinity of the urine will persist, and a speedy recurrence of stone take place; secondly, the condition of the prostate in these cases not only does not improve, but gradually becomes more troublesome as age advances, and auto-catheterism is rendered increasingly difficult. The following indications have to be carried out:—1. Remove the stone. 2. Cure the cystitis. 3. Give the patient a short and ready route to his bladder for the catheter. A case such as the above is in this country too often relegated to lateral lithotomy, which is unnecessary and uncalled-for, for directly the surgeon has grasped the stone with his forceps it crumbles to pieces, and the operation, instead of being a speedy one, becomes a prolonged one, for he has to extract some twenty or thirty pieces, during all which time the man's engorged prostatic plexus of veins pours out blood like water. In devising an operation for such a case, we must take cognisance of the following facts. The stone is soft, and can on the slightest pressure be reduced to fragments small enough to pass along the normal urethra. An incision into the bladder is therefore unnecessary; but we want to cure the cystitis which caused the calculus, and this can only be done by allowing the urine to run out as fast as it enters the bladder, and so give it a physiological rest. We require further a short route for the catheter to go into the bladder. External urethrotomy fulfils all these conditions. All we have to do is to reduce the stone to fragments with the lithotrite, extract them through the perineal puncture, and wash out the bladder, leaving in a tube for drainage: the small puncture being kept permanently open for catheterism. It will at once be seen that whereas lateral lithotomy was a dangerous operation, and the wound could not be utilised for future catheterism, this combination of mine is attended by but little risk, comparatively speaking, and the aperture can be made useful for catheterism. What is it that makes lithotomy a perilous operation whilst external urethrotomy is not? It is because the former is an *intra-pelvic* operation, whilst the latter is an *extra-pelvic* one. Thus, therefore, by reducing the lateral lithotomy to a mere external urethrotomy, we shall diminish the rate of mortality correspondingly. I believe I was the first to introduce this combination, and in the unpromising cases in which I performed it, it was followed by the best results. But it may be asked, Is not this the perineal lithotrity of Dolbeau? It is not. There are two objections to this operation. In the process of dilating the urethra with instruments the urine always escapes, and the canal is very likely to be injured. The stone has consequently to be broken up in an empty bladder, which is a difficult and dangerous procedure if it be large, and during the long and tedious process the patient is bleeding, and no means can be taken for its arrest. Dolbeau cut first and then crushed the calculus through the perineal wound. I, on the contrary, crush first through the penis, and then cut. The operation of breaking up a large stone during lithotomy into several small ones is of ancient date, and is called "fragmentation" by the Americans, to distinguish it from lithotrity, which it is not. I consider therefore that the combination of a perfect lithotrity at one sitting, followed immediately by external urethrotomy, is the proper treatment for large phosphatic calculi in men who are the subjects of chronic cystitis, and who are obliged to use the catheter; for we remove the stone at a minimum risk, we give the bladder the physiological rest it requires, and we convert penile catheterism, which in these cases is often a painful, bloody, and difficult process, into perineal instrumentation, which is free from all these annoyances. Last August I published the results of my first series of one hundred consecutive cases of operation for stone in the bladder; it is not, therefore, now necessary for me to trouble you with statistics.

In bringing these lectures to a close, I would express my regret that time has only permitted me to glance very cursorily at some of the more salient points of my subject; and I desire to thank you very sincerely, Mr. President and gentlemen, for the kind and cordial reception you have given me.

ON THE ANTI-MALARIAL ACTION OF THE CHINCHONA COMPOUNDS.

BY T. J. MACLAGAN, M.D.

THAT quinine cures ague is one of the best established facts in practical therapeutics. How it does so we do not know. And it is impossible that we can know until we have some idea of the nature and mode of action of the ague poison. The existence of this poison is known to us only by its effects. These effects are the various forms of malarial fever.

Malarial fevers are most prevalent in marshy localities, in which there is much decomposing vegetable matter. Whatever puts a stop to this decomposition seems to arrest the development of the miasmatic poison. Cold weather, the complete drying up of the marsh, its drainage, even its submergence under water during a wet season, seems to have the effect of checking the spread of malarial fevers. These are exactly the circumstances which would check vegetable decomposition.

Marshes situate near the sea, and liable to inundation by it, are, *cæteris paribus*, more malarious than those which have no admixture of salt water. Salt water kills fresh-water plants. Marshes liable to such inundation thus contain more decaying vegetable matter than those whose water is always fresh.

Malarial fevers are most common in autumn, when the vegetable matter formed during the summer begins to decay, and while the heat necessary to its rapid decomposition still prevails.

The association of malarial fever with vegetable decay is undoubted. What is the nature of the association?

Finding it all but invariable, the conclusion was not unnaturally drawn that the malarial poison was a product of vegetable decomposition; and various gaseous products of such decomposition have been suggested as possibly constituting the toxic agency. It has been found, however, that not one of these produces malarial disease.

Many marshes, too, contain much decomposing vegetable matter, and present all the conditions indicated as requisite to the development of malaria, without being a source of malarial disease. Where malaria prevails vegetable decomposition is generally abundant and active. But the converse does not hold good; for vegetable decomposition may be abundant and active in a locality which is not malarious.

No product of vegetable decomposition has been proved to be competent to cause intermittent and remittent fevers, and no causal connexion has been established between vegetable decay and the occurrence of these maladies. But there is another view of the matter, another possible explanation of this association.

Malarial fevers are most common in autumn, when vegetable decay is most active. But decay is a mere sequence of death, and death simply the cessation of vital activity. Autumn marks the time at which the annually-recurring active growth of plants comes to an end. The increased prevalence of malarial disease in autumn is thus associated with the cessation of the growth of living as much as with the decay of dead vegetable matter. It is possible that the association may be with the former rather than with the

latter, and that the arrest of the processes which constitute vegetable activity may have more to do with the development of malarial diseases than has the occurrence of the changes incident to vegetable decay.

Malaria exists in the ground, emanates from it, and infects the atmosphere in its neighbourhood. Of this there is ample evidence:—

1. The diseases to which it gives rise are associated with certain conditions of the soil.

2. Such disturbance of the ground as cultivation implies often leads to the development of these diseases.

3. The poison does not operate at more than a certain height above the sea-level.

4. Those who sleep near the ground are more apt to suffer than those who are more elevated.

A poison which is in the ground, and which infects only that part of the atmosphere which is near the ground, has its seat in what may be called the vegetable tract. The chief area of malarial infection is the area of vegetable influence—the ground in which the roots are, and the atmosphere immediately around the leaves.

Now, supposing the malarial poison to be (as it almost certainly is) something which may be taken up and absorbed by plants during their growth, it is evident that less of the poison would be spread abroad and be available for the production of disease during spring and summer, when vegetation is active, than in autumn, when the cessation of growth would leave much of it free; while the cold of winter might check the development of malaria as well as of vegetation. Thus the autumnal development of malarial fever may be causally associated with the autumnal cessation of vegetable growth.

Evidence in support of this view is found in the purifying effect of vegetation on a malarial atmosphere, as testified to by some facts noted in a study of the natural history of malarial fevers.

The marsh poison is carried about in air currents, and may thus give rise to malarial disease at some distance from its home. These malaria-laden breezes may be robbed of much of their deleterious properties, and rendered comparatively innocuous, by having to pass through a belt of trees. On the other hand, the cutting down of trees has been followed by the development of malarial fever in localities which have thus been opened up and exposed to direct currents from a malarious district.

It is claimed for some trees and plants, and not without some show of reason, that they possess the property of removing malaria, and rendering a district more healthy. The one quality common to the trees and plants which have been so commended is rapidity of growth, implying great activity of the nutritive process. We know that malaria may be taken into the system of man either through the lungs, or in drinking-water through the digestive organs. There is no reason why it may not in like manner be absorbed by plants, either from the atmosphere by the leaves, or with water by the roots, or by both channels. There is no other mode in which vegetation as such could produce a purifying effect on a malarial atmosphere.

The cessation of vegetable growth in autumn would thus explain the autumnal prevalence of malarial fever. The poison which produces that fever may be as abundant in summer, but the active state of vegetation at that season leads to the absorption of much of it by the leaves and roots of plants, and to the consequent removal of much of the poison from the soil and atmosphere. In other words, malaria seems to be developed during the hot season, but it is chiefly at the latter part of that season, when ordinary vegetation ceases to be active, that it has full scope for its disease-producing powers.

Again, malarial atmospheres are more deadly during the night than during the day. The literature of the subject abounds with instances in which the members of a ship's crew who went ashore in a malarial district only during the day escaped, while those who remained all night suffered from malarial fever. This deleterious effect of night air is well known to dwellers in malarial districts, who during the day go freely and with impunity into places which they would not think of visiting at night. No satisfactory explanation has ever been given of this. It has been supposed to be due to chilling of the body by night air, but the night may be oppressively hot, and the result is the same. It has been attributed to the lowering of vitality during sleep; but sleep may be indulged in during the day with impunity, and being awake at night does not protect from danger. Dr. Mitchell of Philadelphia thought that malarial poisons were allied in nature to the fungi, and that, like mushrooms, they grew during the night. It has been supposed, too, that vapours which are dissipated abroad during the day, and are again condensed near the ground at night, may contain the malarial poison, and that it may be dissipated, and again condensed, with the vapour.

But none of these views would explain the purifying effect of vegetation on a malarial atmosphere. Another factor is almost certainly at work. If the view which has been advanced as to the mode in which trees act as purifying agents be correct, it necessarily follows that this action must be less during the night than during the day, for night is the time at which leaves cease to perform their absorbent function, and at which, therefore, they would cease to exercise a purifying influence on a malarial atmosphere.

The view that the malarial poison is absorbed by plants and trees is the one which best fits into and explains the facts with which we have to deal.

But still the question remains, "What is the nature of this poison?"

The opinion most generally entertained nowadays is that the malarial poison consists of minute organisms. "I have no hesitation," says Niemeyer, "in saying decidedly that marsh miasm—malaria must consist of low vegetable organisms." Though the evidence is scarcely sufficient to warrant so strong a statement, there can be no doubt that this is the view which best accords with the phenomena noted in connexion with the origin and spread of malarial disease. The usual objection to this view is that, if such were the nature of the poison, its existence could be demonstrated by the microscope. But that by no means follows. The microscope can demonstrate the existence of very minute organisms; but beyond a certain point it cannot go. And it has to be borne in mind that the limit to microscopic demonstration of such minute objects is not the mechanical power of the microscope, but the visual power of our eyes. An object may be magnified 30,000 times and be visible, and yet disappear from the field of our vision when magnified 60,000 times. The object is there, but its image is so attenuated by the increased power of the microscope that our eyes can no longer detect it. Professor Tyndall has demonstrated that the atmosphere habitually teems with particles so minute that they cannot be detected by the highest powers of the microscope, and that many of these particles are organised. With the knowledge that organised particles so minute do exist, we cannot fail to see that our inability to demonstrate that malaria is particulate and organised is no proof that such may not be its nature.

Certain it is that this view is the one which best explains the phenomena with which we have to deal. Adopting it, we can at once see (1) why a damp locality favours the development of malarial fever; for moisture is favourable to the development of organised life; (2) why the drying up of the soil and the onset of cold weather lead to an opposite result; for such conditions check the growth of organisms; (3) why complete flooding of a marsh has the same effect; for such an event puts a stop to direct communication between the soil and the atmosphere. (4) This view gives also an adequate explanation of the purifying effect of growing plants and trees on a malarial atmosphere. If malaria consists of organisms so excessively minute that their size can be no obstacle to their absorption by the roots and leaves of plants.

The recent researches of Lanzi and Terrigi,[1] and the still more recent ones of Professor Klebs and Signor Tommasi-Crudeli,[2] made in the malarial district of the Agro-Romano, near Rome, point to the conclusion that the malarial poison is an organism which may be obtained from the soil, and may be cultivated in the bodies of animals. This organism, say the last two observers, belongs to the genus Bacillus, and exists in the soil of malarial districts in the form of shining ovoid spores: to it they propose to give the name of Bacillus malariæ. By inoculating rabbits with liquids taken directly from malarial soil, and containing this bacillus, there was produced fever, often of an intermittent type. Another result of such inoculation was enlargement of the spleen.

It is apparent that authority and evidence favour the view that malarial poisons are minute organisms. Such being the case, we shall assume that they are so, and shall proceed to investigate the probable mode of action of such organisms

[1] Centralblatt f. Med. Wiss., 1875.

[2] Allg. Wien. Med. Zeit., No. 28, 1879; and London Med. Record, Oct. 15, 1879.

on the system. For if this view of their nature be correct, the phenomena to which they give rise in the system must be such as an organism would produce; and a detailed consideration of these phenomena will tend to throw light on the true nature of the poison which causes them.

Malarial poisons may act like ordinary medicinal and poisonous agencies; they may act after the manner of contagia, and have their action intimately connected with their organic development; or their mode of action may be altogether peculiar. To say that malarial poisons act like ordinary medicinal and poisonous agencies is not to explain their mode of action, for of the manner in which many of these produce their effects we know little or nothing. Malaria differs, too, so widely from such agencies, both in its nature and in the effects to which it gives rise, that it is likely also to differ from them in its mode of action.

That contagia are organisms, and that their morbific action is intimately associated with and dependent on their organic growth are propositions which I have elsewhere[3] considered and maintained in some detail. The evidence in support of this view may be briefly summed up as follows:—

1. The effects produced in the system by a given contagium bear no relation to the quantity administered—a small dose acting, if it act at all, as vigorously as a large one.

2. During its action the poison is largely reproduced in the system.

3. The quantity eliminated from the system is always greatly in excess of that received into it.

4. The locality in which its action is most marked—the seat of the local lesion in the eruptive fevers, for instance—is also that in which the poison exists in largest quantity.

5. The action of the poison ceases while the system still contains a much larger quantity of it than sufficed to cause the disease to which it gives rise.

6. The maladies produced by the contagia are communicable from the sick to the healthy.

The existence of such peculiarities creates a broad line of demarcation between contagia and ordinary medicinal agencies. They also separate them from malaria: for in malarial disease there is not the same evidence of organic reproduction; there is no evidence of elimination of the poison; and malarial fevers are not communicable from the sick to the healthy.

The question of the mode of action of malaria is, indeed, beset with peculiar difficulty; for, unless possibly in the experiments of Klebs and Tommasi-Crudeli, already referred to, the poison has never been separated and experimented with.

If malarial poisons are organisms—and the evidence all favours the view that that they are so—they are more likely in their mode of action to resemble contagia than ordinary medicinal agencies. It is to be noted as evidence in support of such a view that the phenomena to which they give rise in the system are more analogous to those resulting from the action of contagia than to any effects ever produced by ordinary poisons and medicines.

Both contagia and malaria are intangible agencies introduced into the system from without. Both are associated with bad hygienic conditions. Both have for the most striking of their effects on the system the occurrence of idiopathic fever. In each of them the fever is specific in nature, and in each it has a more or less distinctive course.

The existence of such analogies constitutes a reasonable foundation for the view, not only that malarial poisons are allied in nature to the contagia, but that they are also likely to resemble them in their mode of action. If they act after the manner of contagia, and owe their effects to their organic development within the system, we shall find evidence in support of this view in a detailed consideration of the phenomena to which they give rise.

The essential characteristics of the form of fever which is universally regarded as of malarial origin are its intermitting or irregular course and its occurrence independently of a local inflammatory cause. The question which we have to consider is the competence of an organism to produce such a result.

That the reproduction of an organism in the system is capable of producing the essential phenomena of the febrile state, I have in the case of the continued fevers shown in some detail,[4]

An organism has for its most distinctive characteristics: (1) the power of organic reproduction and development, and (2) a certain action on its environment. This latter is dependent on the former, and consists mainly in the consumption of nitrogen and water. But nitrogen and water are the very materials required by the tissues of the body. The propagation in the system of millions of organisms having such wants, must lead to an enormous increase in the consumption of these materials. This means simply the development of fever, for such an increase must give rise to quickening of the circulation, increased tissue-waste, increased consumption of water, rise of temperature, and increased elimination of urea. This aggregate of phenomena constitutes the febrile state. The propagation in the system of such organisms as I believe malarial poisons to be is, therefore, competent to the production of the most prominent and essential feature of the maladies to which these poisons give rise—idiopathic fever.

(To be concluded.)

[3] The Germ Theory applied to the Explanation of the Phenomena of Disease. By T. J. Maclagan, M.D. (Macmillan and Co., 1876.)

[4] Maclagan, op. cit.

ON THE TREATMENT OF CHRONIC INFLAMMATORY AFFECTIONS OF THE JOINTS IN CHILDHOOD, WITH ESPECIAL REFERENCE TO EXCISION.

(PART OF A CLINICAL LECTURE.)

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AFTER discussing the nature of chronic inflammatory affections of the bones and joints in childhood, and arriving at the conclusion that, although they often follow an injury, they are generally something more than traumatic, and depend on the presence of the tubercular diathesis—which however is often so far modified in transmission, by admixture with other constitutions, or with a healthy stock, as to lose what are usually regarded as its characteristic features,—and after referring to Sir James Paget's views on the minor signs of constitutional diseases,[1] the speaker continued:—The belief that they are modifications of tuberculosis may seem to stamp these diseases as highly intractable, or even, as many regard them, little better than incurable. Happily, however, experience leads to quite an opposite conclusion, and proves that a large majority of these cases may be cured without any remaining impairment of the functions of the limb.[2] This is a matter of great practical importance, for chronic affections of the joints constitute a very large part of the more grave surgical diseases of childhood. Every year hundreds of children are crippled by them, and the misery they entail is deplorable.

The method of treatment by which these cases may be cured has long been before the profession. It consists in keeping the affected parts at complete rest, and in good position, by means of leather splints or some similar appliance, so that deformity is prevented; and in the use of remedies against the tubercular diathesis. It would be needless to insist on the value of what may seem to you so well known and commonplace a scheme of treatment, were it not that there are many who appear not to believe in its efficiency; for almost every week cases are brought to the hospital which have been treated merely with tonics and blisters or with mercurial ointment, or tincture of iodine, while the affected joint has been steadily growing worse, and more and more distorted. In many of these cases, especially of knee disease, nothing remains to be done but excision or amputation, or to advise the patient to make the best he can of a distorted and crippled limb, for we possess no means by which, when the tibia is once displaced in relation to the

[1] Clinical Lectures and Essays, second edition.

[2] Observation shows that the intensity or virulence of tubercle differs in different structures and in different individuals; while it flourishes in some tissues, there are some in which it is rare, and others in which it is never found. Even in the lungs it is not always inveterate, but is often found retrogressive, or already obsolete; and it may be that bone and synovial membrane are structures in which it is prone to be immature, or, under favourable circumstances, even to abort.

condyles of the femur, this distortion can be corrected. In the following remarks the hip is excluded. The diseases of this joint require special appliances, the details of which I have already ventured to describe.[3]

Although there are several methods by which rest may be more or less satisfactorily secured for diseased joints, the most convenient, as I have already mentioned, consists in the use of well-made leather splints. They must be long enough in the axis of the limb to give thoroughly efficient support. This is especially important for the knee and the elbow. For these joints the splints should extend as high as the upper fourth of the thigh or upper arm, and as low as nearly to the ankle or wrist. The elbow should be put up just within a right angle; the knee as nearly straight as it can easily be brought; the wrist slightly flexed, and the ankle very carefully at a right angle with the leg. Should the ankle be fixed with the heel at all raised towards equinus, the calf muscles are prone, by shortening themselves, to lead to troublesome contraction of the tendo Achillis. The parents are directed to take off the splints once a day, to readjust them, and see that the skin is sound; but with this exception they are worn constantly day and night. They are cut away over any sinus there may be, and wherever threatening suppuration produces local tenderness. If when first seen a knee is found to be contracted, it is put up without any attempt to alter its position. The surrounding muscles under the influence of rest soon relax, and then the joint will gradually become extended, so that the original splints no longer fit. These must now be exchanged for a straighter pair; and these again, in their turn, must give place to a pair adapted to the limb when it has reached the straight position. This spontaneous extension of a limb may be regarded as a sure sign that the state of the joint is steadily improving. These remarks refer only to simple flexion. If there is dislocation, splints can do little, as I have said above, to remove it.

The leather of which the splints are made must be carefully selected. Their credit is often damaged by the use of the wrong material. Common sole leather contains a good deal of grease, and has been compressed in the process of manufacture. This kind remains stiff and clumsy, even after prolonged soaking. You must use leather from which all grease has been removed and which has not been compressed. Such leather, when soaked for five or ten minutes in water at a temperature of about 120°, to which a little vinegar has been added, becomes perfectly flexible and limp, and will either stretch or close like wet flannel, so as to adapt itself to the uneven surfaces of a limb as accurately as a plaster-of-Paris mould. To make the splints take patterns of the two aspects of the limb in brown paper; cut out two pieces of leather according to these, but a little larger in all directions, and, when they are soaked, apply them closely and smoothly to the joint, letting them overlap at their borders; then fix them with a flannel bandage, and leave them for twelve hours to dry and harden upon the limb. Now trim them so that they just meet around the limb without overlapping; cut them away over the front of the patella and bevel their edges, and, with the help of thick paste, line them with chamois-leather; and furnish them with wide webbing straps fastening with buckles.

I know there are many to whom the idea of keeping joints so long at rest does not commend itself. But, in the first place, the repair of diseases so tenacious as these affections are cannot but be otherwise than slow; and, after all, we encounter here only the same difficulties as we meet with in cases of enlarged glands, of ophthalmia, otorrhœa, or ozæna. All these affections demand a large amount of patience. And is it not incumbent on those who reject this method to say what alternative can be adopted? How do they cure these cases? One objection accepted by many as weighty against the principle of long-continued rest is that the joint may become anchylosed. I am convinced this fear is groundless. Experience shows that anchylosis does not occur. A child with well-marked synovitis of both knees of ten months' duration wore splints for upwards of two years, yet her joints, which are now quite sound, preserve their full normal range of movement. Many similar cases might be reported. I have never seen anchylosis occur except in cases in which there has been either acute or long-continued suppuration. Indeed, even if suppuration has lasted for many months anchylosis, whether bony or fibrous, is by no means always the result. I have notes of many cases of repaired hip disease in which, though suppuration existed for periods varying from six to twelve months or even longer, considerable movement remains in the joint. But besides their beneficial effect on the course of the disease itself, the leather splints serve another purpose. They entirely *prevent deformity*. This is a point of the very first importance. As long as you keep these diseased joints in children free from distortion there is—except in all but very rare examples of acute suppuration or where the articular ends of the bones are widely involved—good ground for hope that their cure may be effected. But who has not seen cases in which, though extensive disease of the knee has been completely repaired, the limb is rendered useless by the amount of distortion which has taken place; or others in which, though the disease has never been more than slight in itself, so much deformity has gradually supervened that the joint is irreparably spoilt? But you will ask, Is surgery unequal to the treatment of these distorted joints—are not these just the cases for excision? I grant these, if any, are the cases for which excision is appropriate; cases, that is, in which there is little or no disease, but much distortion. But the point is that you excise a joint not because it is the seat of incurable disease, but because it has been allowed to get out of shape. Prevent the deformity and the necessity for excision vanishes.

As I have mentioned excision, let me review the position which this operation seems at present to hold in the treatment of diseases of the joints.

There was a time when these diseases were "touched" or treated by some charm or quack nostrum. Next came the amputation period, in which diseases thought to be incurable were got rid of by the simple expedient of cutting off the limb. Numbers of limbs in those days were cut off not only for advanced disease of a large joint, but for abscess in the articular ends of the bones, and even for neuralgia and hysteria. The age of amputation was followed by the age of excision. Some thirty years ago Sir William Fergusson attacked the too prevalent fashion of amputation, and, holding that however admirable a wooden leg might be a limb of flesh and blood was better, proposed to save the limb by cutting out the affected joint, and thus was founded a school that became the most popular of its day under the seductive title of conservative surgery. But conservative as excision undoubtedly was as compared with amputation, it embodied no final result; it was only a link in the chain of progress; and where Fergusson left the work it has been the duty of those who have followed him to take it up. Nor have they failed to do so, for whereas excision was performed some twenty years ago for a variety of conditions, it is now, by nearly common consent, resorted to in only a comparatively few carefully selected cases. This change of opinion respecting excision, especially in childhood, has no doubt been due in part to an increased experience of its dangers and its drawbacks in regard to the future condition of the limb. But it has also been largely owing to the same conservative spirit which led Fergusson to the happy expedient of excision as a substitute for amputation. Many surgeons have found that by treating these joint diseases in their early stages, so severe a measure as excision can, in the great majority of cases, be avoided, and that, even in their later stages, they may be successfully dealt with by aspiration, drainage, or free incision, under the safeguard of due precautions.

I know that I am not expressing a unanimous opinion. Some operators still frequently resort to excision, even for incipient disease, and point in triumph to the admirable results they obtain. The proceeding has, it is said, hitherto so often failed because it has been performed too late. Only perform the operation early enough, and the cure is safe and rapid. We learn from the cases that are published that excision, done under the ægis of the antiseptic method, is shorn of all its dangers: there is no surgical fever, the wound heals quickly, and the patient is up and walking about not in so many months, but in so many weeks—nay, almost in so many days. These are, no doubt, important facts, yet they do not suffice to prove that excision is the proper treatment for these cases. The rapid healing of a wound is one thing: the future of a limb out of which the knee-joint has been cut is another. It must be remembered what excision is. It is not the cure of disease, but the cutting out of the diseased part. It is not reformation, but capital punishment. It is like the practice of a dental surgeon, who, instead of stopping a tooth, beginning to be carious, should at once extract it; or like that of an ophthalmic surgeon, who, instead of trying

[3] Brit. Med. Jour., 1877.

to cure an eye, should forthwith proceed to remove it. No doubt amputation itself is still the readiest method of relieving patients of many forms of disease. The wound heals rapidly enough; but the objection to this short cut to a cure is that the patient finds himself minus a leg. In the same way, after an excision, the patient's wound may heal without a check (though it does not always do so); but, then, he has lost his knee-joint, and this is surely not a light matter. The limb after excision of the knee in childhood, so far as present experience goes, is always stiff, short, and atrophied, and, not rarely, it is deformed; and until different results can be shown—not, of course, in a few exceptional instances, but as constituting the rule—I must rank myself with those who believe that real progress lies, not in the encouragement of an earlier and more general resort to excision, but in the demonstration of the fact that if these cases are kept at rest and in good position their cure is, in the great majority of instances, simply a question of time; and that if they are so treated while they are incipient they may be cured without any, or with very slight, impairment either of the structure or the function of the limb, and much more speedily than perhaps many have supposed.

May not a substantial argument against the frequent use of excision be drawn from the fact that the operation is next to never performed in private practice? If it is so excellent a method, why is it not recommended by the leaders of surgery to their rich patients? Why are not the rich to avail themselves of it as they do of ovariotomy, of lithotrity, of operations for strangulated hernia or the removal of tumours? But it will be said that the circumstances of the well-to-do are so different from those of the poor, that what is possible in the one class is impossible in the other. This is an argument which may fairly be used in respect to the past, and, though with diminished force (for circumstances have much changed for the better), to the present. But what has been, and to some extent still is unavoidable, through the want of hospital accommodation and a system of home nursing, that such important parts of the body as the large joints should be cut out when in a state of scarcely more than incipient disease, on the plea of saving time—that disease, that is to say, should be treated not upon its merits, but according to the external circumstances of the patient; that there should, in other words, be one rule for the rich and another for the poor; that while the rich child is cured by three, six, or nine months' rest, the poor child, to whom a sound limb is one of the necessaries of life, shall submit to all the risks of what must always remain one of the most formidable operations in the surgery of childhood, and be subjected to, I had almost said, a mutilation, but at all events a loss, which leaves him a cripple, however sturdy and however resigned—this is a state of things which will certainly not be allowed to continue. We constantly see that what is the exclusive and costly privilege of the rich in one generation, becomes, in the next, the unchallenged possession of the poor, and I cannot doubt that, with the reconstruction of our hospital system, which is so much required, and which we are promised in the near future, means will be provided for the efficient treatment of these joint affections in childhood—treatment which, being applied while cases are incipient, and being carefully carried out, will render excision as rare among the poor as it now is among the rich.

BEQUESTS ETC. TO MEDICAL CHARITIES.—The Clothworkers' Company have given thirty guineas to the National Hospital for Consumption, &c., at Ventnor, twenty-five guineas to the Seaside Convalescent Home at Seaford, twenty guineas to the North Eastern Hospital for Children, twenty guineas to Queen Charlotte's Lying-in Hospital, and twenty guineas to the Cancer Hospital. Mr. R. K. Hodgson has given £50 to the Charing-cross Hospital. The National Hospital for Consumption, &c., at Ventnor, has received £50 in memory of J. A. S. Freeland. The Mercers' Company have given £25 to the Royal Kent Dispensary, Greenwich, out of the funds of the Earl of Northampton's Charity. The General Hospital, the Queen's Hospital, the Children's Hospital, and the General Dispensary, all at Birmingham, have received £100 each under the will of Mr. J. R. Mott. Mr. Robert Few has given £100 additional to the Charing-cross Hospital. The Grocers' Company have given £100 to St. George's Hospital. Addenbrooke's Hospital, Cambridge, has received £50 under the will of Miss Matilda Abbott.

A NOTE ON AN OUTBREAK OF RUBEOLA (RÖTHELN).

BY W. R. GOWERS, M.D., F.R.C.P.

DR. DYCE DUCKWORTH'S remark, in a recent paper, that our knowledge of "rubeola," or "German measles," is still so imperfect that all cases of the affection deserve description, induces me to place on record a brief note of a series of cases which I had an opportunity of closely watching about two years ago. A nursemaid, exactly a fortnight after entering a household, presented a rash on her face, chest, and arms. She had been suffering from cold and slight sore-throat (apparently a simple catarrh) for four or five days. There was slight elevation of temperature (about two degrees). The eruption on the chest closely resembled that of scarlatina, the spots being confluent; on the arms it was nearly like measles, but rather brighter in tint. It was, in fact, thought probable that it was measles, and she was sent to the Fever Hospital. When she reached the hospital the rash had almost disappeared (as I was afterwards informed by Dr. Murphy), and she was quickly well. The eruption had lasted about thirty-six hours. It was not noticed until fully out, and she was then attending to two children—one aged two and a half, and the other three months—and she undressed them both and put them to bed whilst the rash was out. An hour or two afterwards it was discovered, she was separated, and did not again see the children or their mother. Exactly fourteen days subsequently the latter (who had had true measles), after a day of malaise, presented a rash which was at once recognised as "German measles." It was "measly" in distribution, but brighter in tint, and commenced on the backs of the forearms. In the evening slightly elevated spots were seen, on which, by gaslight, no abnormal tint was visible; but next morning arms, face, and chest were covered with an unmistakable rash. She was at the time suckling the youngest child, and did so during that night. In the morning the child was separated and weaned. Two days later the mother's rash had entirely disappeared. She remained secluded from the children for two days more, and then returned to them, but did not again suckle the baby. Just a fortnight later both the children presented a rash exactly like that of the mother, but slighter. It lasted about twenty-four hours, and then disappeared. Their indisposition was trifling.

In this case the period of incubation certainly in the mother, and probably in the nursemaid, was just a fortnight. The fact that the children were more exposed to the contagion than the mother, and yet did not contract the disease from the nursemaid, is remarkable, and corroborates the fact observed before that adults are as liable to the disease as children, if not more liable. The period of incubation in the children was either eighteen days (if contracted before their separation) or fourteen days (if contracted after the mother rejoined them). The latter seems much the more probable. So long an incubative period as eighteen days has not, I believe, been observed, and fourteen days was distinctly the period in the mother. If so, it would seem that the contagion was much stronger two days after the disappearance of the rash than it was when the rash was at its height—a very important practical fact.

I would ask those who may have an opportunity of observing the rash in the early stage to note whether it is common for the elevation to precede the blush, and whether it is common for the eruption to commence on the backs of the forearms. Of course, it is only in cases, as in this, in which the most careful look-out is kept for the earliest symptoms that these points can be noted. If corroborated they would possess diagnostic importance.

It seems highly probable that a large number, perhaps all cases, of sporadic rash, in which doubt is felt as to whether the case is one of scarlet fever or of measles, are cases of this disease.

In none of the cases of this series was there any enlargement of the lymphatic glands. It is possible that there may be more than one distinct disease to which we apply the terms rubeola and rötheln.

Queen Anne-street, W.

NOTE ON THE USE OF LARGE PROBES IN THE TREATMENT OF LACHRYMAL OBSTRUCTION.[1]

BY SIMEON SNELL,

OPHTHALMIC SURGEON TO THE SHEFFIELD GENERAL INFIRMARY AND TO THE SCHOOL FOR THE BLIND.

THE plan of treatment in the class of cases indicated by my title, at present most generally adopted and introduced by Mr. Bowman, has undoubtedly rendered immense services. Successful, however, as it is in many instances, experience shows, I think, that there are a good number which appear little benefited by it, and after the probes have been passed several times in succession there is still a recurrence of the obstruction.

For some time I have been under the impression that the probes commonly used were not large enough for the purpose for which they were intended—viz., to restore the narrowed duct to its normal calibre. The analogy of the introduction of large urethral sounds by Otis, interested me somewhat in this direction, and I was, moreover, chiefly influenced by the utter disproportion that the probes showed to the size of the duct as represented in the anatomical subject.

Authorities, strange to say, while all describe accurately the length of the nasal duct, with few exceptions are silent as to its width. The calibre would, however, appear to vary somewhat. According to one authority it would measure from just three millimetres to four millimetres; and to another from three millimetres to four and a half. I have, moreover, satisfied myself in the dry skull that often the passage of a four-millimetre probe is very easy, whilst in other ducts, even in the same skull, it is difficult.

The disproportion between these measurements and those of the probes will be at once apparent, when it is stated that the largest of the set of probes in general use is a millimetre or little more. The bulbed probes used by Mr. Teale are larger, and the biggest of the set I possess is about two millimetres, and I should add that I fancy I remember seeing Mr. Bowman employ a larger probe at Moorfields some years ago.

The large probes which I now use I was induced to have made after reading an article in Knapp's "Archives of Ophthalmology" (vol. vi.), by Dr. Theobald of Baltimore on the use of large probes in strictures of the nasal duct. The probes are made after his scale. There are sixteen; the smallest is ½ mm., the second ½ mm., third ⅔ mm., and so on; the twelfth being 3 mm., thirteenth 3½ mm., fourteenth 3⅔ mm., fifteenth 3⅔ mm., sixteenth 4 mm. The smallest are intended merely for exploring the canaliculi. The probes are conically ended to facilitate introduction. In any case of stricture it has been my custom to use, in the first place, one of the smaller probes—a millimetre or a millimetre and a half, or less—according to the tightness of the stricture, following it immediately by a larger one. At the visit the next day, or following one, another probe still further increased in size is introduced, and so on.

During the past year (1879) I have used these probes in about twenty cases, and as yet have not seen the necessity for the four-millimetre one, but have found those ranging from about 3 mm. to 3½ mm. the most useful. Dr. Theobald, however, stated that he had frequently employed the largest size even in young persons.

Judging from the cases in which thus far I have adopted this method, I certainly incline to the opinion that it is superior to that with the smaller probes, that the results have been better and more rapid, and that it is worthy of extended use.

Since the above was written, six months ago, I have continued the employment of this method, and have treated several additional cases by it. I have no reason to think less favourably of it, but perhaps more so. Weiss is at present engaged in making another set of the probes for me. The number of the small probes will be reduced, the larger ones will be of a different size at either end, and bent to avoid the prominence of the forehead. A reduction in the number will be thus effected, without interfering with the utility of the gradual gradations in size.

Sheffield.

[1] Read before the Leeds and West Riding Medico-Chirurgical Society, Feb., 1880.

CASE OF EXTRA-UTERINE FŒTATION, SIMULATING OBSTRUCTION OF THE BOWELS.

BY JOHN WHEELER, M.D., CH.M., L.M.

MRS. S——, aged forty-four years, of sallow complexion, has borne one child twenty-three years ago, since which time she has not been pregnant. Was married to her second husband ten years since. Was seized with violent abdominal pains and vomiting on Saturday evening, March 6th, immediately after partaking of some oysters. She sought medical aid in the night, but was unable to procure it. I saw her for the first time about 1 o'clock on Sunday afternoon, the 7th inst., when her condition was as follows:—She was lying on her back with knees drawn up; countenance anxious; extremities cold; teeth chattering; pulse 140; quite conscious; tenderness all over abdomen; no action of bowels or bladder; obstinate and almost incessant vomiting, or rather regurgitation of thin grumous matter; extreme thirst. She attributed her painful condition, &c., to the oysters she had partaken of the day before. I found upon inquiry that, though the menses had ceased about the end of December last, and having noticed an enlargement of her breasts, she consulted a medical man as to her condition, who introduced the sound, and informed her that she was not pregnant.

Looking upon the case as an aggravated one of gastric disturbance with constipation, I, after injecting a sixth of a grain of morphia subcutaneously, with the object of alleviating the pain and vomiting, ordered turpentine stupes to abdomen, and prescribed five grains of subchloride of mercury to be taken immediately, and to be repeated in six hours if the bowels were not relieved, and to have iced soda-water, with milk and beef-tea. At 6 P.M. there was no improvement in her condition. Ordered an enema, composed of turpentine and castor oil. 9 P.M.: Same condition. Passed catheter, and drew off about one pint of urine. Repeated enema, which had no effect. Pulse now small, weak, and irregular, 150.

March 8th. — 10 A.M.: Spent a restless night; had no sleep; pain over abdomen increased; still vomiting; no action of bowels or bladder. Ordered effervescing soda draught with tincture of orange, to be repeated every two hours.—2 P.M.: No change in symptoms. Ordered to suck ice.—6 P.M.: Same condition as at 2 P.M. To have twenty grains of subnitrate of bismuth every two hours. Met Dr. Ryan, of Ladbroke-grove, in consultation between 11 and 12 P.M. Vomiting still persistent. Administered enema of sulphate of magnesia; and upon proceeding to draw off urine, found a sanguineous discharge flowing from vagina having the menstrual character. We now decided to give her two grains of calomel with a quarter of a grain of opium, to be repeated every two hours.

9th. — 10 A.M.: No improvement; no action of bowels; no urine passed.—2 P.M.: To have an enema with long tube of sulphate of magnesia, which returned slightly coloured.—4 P.M.: Injection repeated, which had the effect of bringing away a small quantity of liquid fæcal matter.—8 P.M.: Sickness the same; abdominal pain and tympanites increased. She objected to the enema being repeated.

10th.—11 A.M.: Had no rest during the night; no sleep; everything administered by the mouth returned at once; abdomen more tympanitic and exquisitely painful. Ordered an enema containing two drachms of tincture of opium, part of which only was retained.—6 P.M.: Injected subcutaneously one-third of a grain of morphia, which alleviated pain and vomiting temporarily.—10.30 P.M.: On my asking her if she wished the morphia injection to be repeated, she was sufficiently conscious to make me understand that she did. I accordingly injected a quarter of a grain subcutaneously.

11th.—Died at 3 A.M.

Autopsy, twelve hours after death (Dr. Ryan and Mr. E. T. Ensor being present). Body well nourished and still warm. The abdomen was laid open by a vertical incision through the integument from the ensiform cartilage to the pubes, and a second incision commencing midway between the umbilicus and pubes transversely outwards to the anterior superior spinous process of the ilium; the muscles were also divided in the same direction. The flaps were then re-

flected outwards, thus exposing the contents of the abdominal cavity.

My attention was immediately arrested by two large black clots lying in the folds of the ileum, which were removed. The stomach was next removed and examined; it contained about a pint of fluid, which was found to be chiefly beef-tea and milk. It was quite healthy, and presented no appearance of inflammation. The small intestines were next carefully removed. They were also healthy. Large intestine also healthy. Special attention was paid to vermiform appendix, which was healthy. The large and small intestines were empty; bladder contained about half a pint of urine; kidneys, liver, and spleen were healthy; also peritoneum; no adhesions. In the left inguinal region a tumour somewhat ovoid in form, larger than the uterus (which was natural in size), of a dark red colour, was found imbedded in clots. This proved to be an abnormal development of the left ovary. The clots with surrounding blood were removed, when a male embryo (about eight weeks), three inches long, came into view. I thereupon removed tumour, uterus, and appendages *en masse*. Upon examination of the tumour a rent was perceptible behind and at right side, from which evidently the hæmorrhage took place. The fimbriated extremity of the Fallopian tube was attached to the ovary, all trace of the fimbriæ being lost. The right ovary and Fallopian tube were normal, the former presenting several Graafian vesicles in every stage of development, and one well-marked corpus luteum.

Remarks.—1st. As to treatment. I wish to lay stress upon the value of the subcutaneous injection of morphia, which was the only remedy that seemed to give relief. 2nd. As to duration of life. It was remarkable that the patient should live so long—nearly four days and a half—seeing the amount of effusion and her inability to retain food of any kind on the stomach.

Pembridge-gardens, W.

TRAUMATIC TETANUS TREATED BY CHLOROFORM INHALATION; RECOVERY.

BY FREDERICK A. GRAY, L.R.C.P. LOND., &c.

RECOVERY from traumatic tetanus is sufficiently rare to make it worth while recording any case in which treatment seems to have assisted in bringing about such an issue. In the case of which notes are here given chloroform inhalation was attended with the happiest results, relieving completely the spasms, which were severe and increasing in severity, and threatening suffocation every few minutes.

James Y——, aged ten years, was admitted to Cottage Hospital March 29th, 1879. Fourteen days before admission he caught his left hand in a turnip-cutter, which crushed the middle finger. It had been attended to by a surgeon at the time, but does not seem to have been dressed again till the 25th, he having left the neighbourhood. On the 25th he went to another surgeon, where he had his hand dressed; he then complained of some stiffness and pain of the jaws, and afterwards of pain and stiffness in his back and severe pain in the pit of his stomach, which was of an intermittent character. These pains got worse and more frequent up to the time of his admission.

On admission, March 29th, the middle finger of the left hand was in a very unhealthy condition, the soft parts sloughy, and the bones comminuted up to the second joint, the end of the finger hanging by tendons, and gangrenous. The jaws were almost fixed, and the teeth could not be separated more than a quarter of an inch. Fluids could be swallowed with great difficulty, any attempt producing severe spasm. Opisthotonos well marked, returning every two or three minutes, when pain in the epigastrium was most severe, and the muscles of the abdomen became hard as a board with each recurrence of the spasm. The facial muscles were affected also, and the "risus sardonicus" was well marked. The spasms were most severe, causing the patient to be jerked up in the bed, bent back, with teeth clenched and breathing suspended, till he seemed in imminent danger of suffocation, his complexion assuming an almost black hue at times.

Having been placed under chloroform, the mutilated finger was amputated at the metacarpal joint. During the time he was under chloroform there were no spasms, but they soon began to return on the effects passing off. Hydrate of chloral and bromide of potassium ordered, ten grains of each; this at first relieved the spasm, but soon lost its effect, though the dose was increased.

March 30th.—Determined to keep him under the influence of chloroform, and chloroform inhalation was substituted. This had the effect of preventing spasms altogether if thoroughly under its influence, and he would remain almost free for a couple of hours after, when the inhalation would have to be commenced again. Strong beef-tea and milk were given at regular intervals, when he was allowed to come from under the influence of the anæsthetic. The bowels, which were very costive, were kept open by castor-oil enemata. These proceedings were continued up to the 6th of April, during which time the spasms maintained the same intensity and frequency when the influence of the chloroform was removed. After this the spasms began to abate, and in a few days gave place to twitchings. The chloroform was gradually lessened and then discontinued. The twitchings continued for some days, and were perhaps kept up by some ascarides, of which a dose of santonin relieved him. The wound had in the meantime healed almost by first intention, and the boy was discharged, apparently none the worse for his dangerous illness, on the 15th of April. The total quantity of chloroform inhaled was 3 lb.

Ottery St. Mary.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

(Cases under the care of Mr. FRANCIS MASON.)

MR. MASON has at the present time, or recently had, under care several cases of more than usual interest.

Large Fungating Cystic Adenoma of Breast; Removal; Recovery.—In the women's ward there is a patient, aged twenty-nine, who for the past twelve years has suffered from disease of the right breast. The tumour, which was removed on Saturday, the 17th inst., was about the size of an adult head. It commenced in a small nodule, and steadily increased in size. About one month before admission the skin on the outer side gave way, so that a fungating mass protruded. The tumour had never been painful, and caused no inconvenience whatever, excepting from its size and from the skin wound. There was no glandular enlargement in the axilla, and the patient was in every other respect perfectly healthy. The removal of the tumour was readily effected by a single straight incision, and no skin was taken away excepting a ring around the fungating mass. Mr. Mason remarked on the importance of not taking away the skin in such cases, for it was only stretched over, and was not in any way implicated by the morbid growth, and in this instance, as is usual, immediately after the operation, it so contracted that there was no redundancy. The antiseptic spray was not used, and dry lint was applied as a dressing. On the second day after the operation, the temperature having reached 101°, a fresh dressing of wet lint was employed. On the following day the temperature was about normal, and the case is now making satisfactory progress.

An examination of the tumour showed it to be a cystic adenoma, which, had it been left, might have undergone a spontaneous cure by sloughing of the skin and enucleation of the growth. It was really simple in character, but just the kind of tumour that fifty years ago would have been styled malignant, soft cancer, or fungus hæmatodes.

Hip Disease, Excision.—In the adjacent bed is a little girl, eleven years old, who was admitted about six weeks ago in a most deplorable state of emaciation from disease of the hip-joint. It was determined to operate without delay, as the little patient was evidently being worn out with the discharge, and there were frequent and painful startings at

night. No better proof could be adduced of the advantage of surgical measures in such cases. There were three or four sinuses leading up to the joint, but they were so placed that they could not be utilised at this operation. The usual incision was therefore made over the great trochanter, and the head, which was much absorbed, and the femur were removed at the line of the trochanters. The acetabulum was examined, and found to be free from disease. Beyond having a few hypodermic injections little else was required in the shape of treatment. The child is now convalescent, and looks remarkably fat and well, the wounds being quite superficial.

Genu Valgum.—In the next bed is a case of genu valgum. About a month ago Mr. Mason divided the lower end of the left femur of a girl, aged ten years, transversely, using the antiseptic spray during the operation. The dressings were kept on for three weeks without the least rise in the patient's temperature. Then they were removed, and the wound was quite healed; but as there was a want of firmness in the part the splint was reapplied, the antiseptic dressings being discontinued. The osteotomy was performed from within outwards. In another patient, a girl aged six years, a similar operation was performed, and the antiseptic dressings were not touched for a fortnight. At the end of six weeks the child was discharged with a straight and very useful limb.

Cases of Fracture.—Whilst there are several cases of compound fracture which are progressing most favourably under the antiseptic dressings, there are two cases of simple fracture of more than ordinary interest—one occurring in a woman, aged fifty-eight, who broke her right femur at the junction of the upper and middle third. On examining the bone it was found enormously thickened, and at first gave the idea that there was some growth investing the bony structure and thus weakening it. But, as showing the value of comparing the limbs, the left femur was found to have exactly the same appearance. The woman has a sallow aspect, and says that although she has generally enjoyed fair health, yet she has never been what may be termed strong. The case is being treated with a long outside splint with extension. The other patient is a man, about forty-five years old, who has a simple fracture of the right femur, just below the trochanter, and he states that he has broken the bone in the same place twice before—five years ago and two years ago respectively. In this case there seems nothing about the patient to account for the fragility of the bone.

Suppuration of the Antrum.—In Leopold ward there is a lad, aged seventeen, with suppuration of the antrum. He was quite well until January last, when he noticed a swelling under his right eye, which burst, giving exit to an ounce or two of pus. On his admission there was a fistulous opening, very small indeed, in the situation referred to, and there was also an aperture on the outer side of the first upper molar tooth, the stump of which was left. Under ether Mr. Mason removed the stump, and its removal was immediately followed by the discharge of about two ounces of inoffensive pus. The bone in the neighbourhood was freely gouged, so as to enable the point of the little finger to be introduced into the antral cavity. A piece of lint was passed into the antrum, and within a fortnight a complete cure has been effected. The small sinus under the right eye has quite healed; but as there is a depressed cicatrix, it will be desirable at some time to divide the adhesion subcutaneously. Had there been any difficulty in removing the stump it was intended to open the antrum with an ordinary joiner's gimlet, as we believe was suggested by Mr. Samuel Smith, of Leeds. (See THE LANCET, Feb. 14th, 1857, p. 160.) A peculiar circumstance in this case was the entire absence of fetor in the discharge. In many of these instances the antrum is filled with a more or less solid material resembling putty, and giving off an intolerable stench.

Plastic Operation.—Two interesting cases are under treatment. The first is a patient, aged twenty-six, who, about eighteen months ago, lost the greater part of her nose from sloughing after the application of strong nitric acid for a small ulcer. Three months ago Mr. Mason formed a columna from the upper lip and fixed it to a surface made raw over the nasal bones. Unfortunately, the patient was attacked with erysipelas, and a portion of the flap sloughed, but the lower part remained as a good basis of support. About three weeks ago two bridges of skin were raised from the cheek on each side of the nose, and lint placed under them. In ten days the under surface was granulating freely, and the lower end of each bridge was divided, and the two flaps approximated in the median line and fastened together with silk stitches. At the present time the nose is very presentable, and with another small operation a very good result is anticipated. This method of procedure seems preferable to taking a flap of skin from the forehead, which necessarily leaves a somewhat ugly scar.

The other case is of a poor boy, aged four, with extroversion of the bladder. This, too, is as yet incomplete, but the first step has been successfully accomplished by raising a bridge of skin from the scrotum and bringing it over the penis. The prepuce was brought down and fastened to the lower raw edge of the remainder of the scrotum. In this way about the lower third of the exposed mucous membrane of the bladder is covered. The next procedure will be to take other flaps or bridges of skin from the abdomen after Professor Thiersch's method. We hope to supply a more complete account of these interesting cases at some future time.

ROYAL INFIRMARY, LIVERPOOL.

CASE OF DIABETES PRESENTING PECULIAR FEATURES.

(Under the care of Dr. GLYNN.)

FOR the following notes we are indebted to Mr. Bredin:—

Peter E——, collier, aged fifty-four, was admitted to ward 12 on Feb. 24th. Eleven months before he found that he was passing water rather oftener and in larger quantity than previously. He rapidly lost weight, suffered from extreme thirst, and voracious appetite. For six months previous to admission he felt too weak to do any work and passed as much as sixteen quarts of urine in twenty-four hours.

On admission he was much emaciated (weight had fallen from 11 st. 3 lb. to 8 st. 7 lb.), the skin was dry, and the left angle of the mouth was excoriated. The tongue was very dry and rough. Pulse 75; arteries rather hard and tortuous; pulse tracing showed rounded summit; percussion note impaired over right base; breath sounds slightly enfeebled; vocal resonance diminished. Both crystalline lenses were hazy. Urine 94 oz., light yellow, acid; sp. gr. 1032.

Ordered a diet consisting of 4 oz. of bread, well toasted, three times a day, two pints of milk, chop, tea; to take one drachm of dilute phosphoric acid in a pint of water as a drink.

Feb. 26th.—Urine 104 oz.; sp. gr. 1040; urea 195·87 gr.; glucose 3590·9 gr. Temperature, morning 97·8°, evening 98°. —28th: Urine 110 oz.; sp. gr. 1041. Temperature, morning 97·8°, evening 97·4°.

March 3rd.—Patient felt much stronger, thirst was much less, and he had gained 4 lb. in weight. Urine 50 oz. Temperature, morning 97·8°, evening 98°. — 5th: Urine 48 oz.; sp. gr. 1034. Temperature, morning 99°, evening 99°. — 8th: Urine 52 oz.; sp. gr. 1037. Temperature, morning 97·8°, evening 98°.—9th: Urine 48 oz.; sp. gr. 1033; urea 525 gr.; glucose 1371·37 gr.—10th: Temperature, morning 99°, evening 98°. Urine 52 oz. — 11th: Temperature, morning 99°, evening 97·4°. Urine 54 oz. — 12th: Temperature, morning 99°, evening 98°. Urine 56 oz. — 16th: Temperature, morning 99·6°, evening 98°. Urine 50 oz.

On the morning of the 17th the temperature was 99·4°. The respiratory movements were equal on both sides; vocal fremitus was greater over right than left apex and base. The percussion resonance was impaired over right lung in front from second to fourth ribs; apex hyper-resonant. Breath-sounds were feebler over the right apex. There was crepitation between second and fourth ribs on right side; audible in right interscapular region, not over apex. Respiratory murmur was louder over right than left base. Vocal fremitus was greater over right apex and base. No cough. Evening temperature 98°.

18th: Temperature, morning 97·8°, evening 98·5°. Urine 46 oz. — 19th: Temperature 98°; pulse 72. Urine 60 oz.; acid; sp. gr. 1034; no albumen; urea 91·98 gr. (·35 grm. in 100 cc.); glucose 1979·9 gr. No headache; pupils normal.—20th: Temperature 98·8°. Urine 50 oz.; acid; sp. gr. 1033; no albumen; urea 109·5 gr.; glucose 1690·9. Patient refused to remain in hospital.

The urea was estimated by Russell and West's method, the hypobromide-of-soda solution being always freshly prepared immediately before use. On March 19th and 20th, when only 91·98 gr. and 109·5 gr. of urea were passed during twenty-four hours, the analysis was performed twice, with identical results. Glucose was estimated by means of Fehling's solution.

Remarks by Dr. GLYNN.—In this case the ordinary ratio between the glucose and urea excreted was not only maintained, but the amount of urea was absolutely and very greatly diminished. This did not arise apparently from any intercurrent renal disease, as there was not a trace of albumen in the water, and though there was some increased arterial tension there was no cardiac hypertrophy, no displacement of heart's apex, &c. Neither was there any error, I believe, in the analyses, as they were most carefully performed by my clinical clerk Mr. Bredin.

The pulmonary complications were, as they often are I think in diabetes, latent, with the physical signs of marked disease of the right lung. There was neither cough nor any elevation of temperature.

LUXOR HOUSE OF HEALTH.

LARGE TUMOUR IN THE RIGHT TEMPORAL REGION; REMOVAL; RECOVERY; REMARKS.

(Under the care of Mr. MACLEAN, M.B.)

THE following case, besides its surgical interest, like others which have been recorded in our columns, gives a glimpse of some of the peculiarities of the Egyptian Fellaheen. The name of this institution has curious associations. The natives of Egypt object to enter "hospitals" on account of the bad reputation that the rude surgery of the ignorant native doctors has given them. Instead of being called a hospital, the institution of Luxor is called a House of Health (*Beyt Lissahah*). This useful hospital, consisting of five beds, was started by Mr. Maclean, and is supported by the voluntary contributions of travellers on the Nile.

Hassan M——, aged thirty, agricultural labourer, Mahomedan faith, from the village of Carnak, near Luxor, applied for assistance in the winter of 1877-78; but for some reason never returned, nor did he present himself during the winter 1878-79. In the month of February, 1880, he again applied for relief, and on being asked why he had not come before, replied that he had dreamt that the "doctor" had removed his tumour successfully.

The patient was a very healthy specimen of a Fellah with no other ailment than a large tumour opposite the right temporal region. This tumour was freely movable, hard,

and the skin over it was loose; three lobes could be made out, the two lower being much the smallest and of a hardness approaching that of cartilage. The scalp was greatly hypertrophied and thickened, and lay in folds. The tumour lay over the temporal muscle and had been growing for ten years. The patient was admitted on February 13th, 1880.

On Saturday, February 14th, with the assistance of the secretary of the hotel and a young German gentleman staying there, the tumour was removed by an oval circular incision. The superficial temporal artery and anastomosing branches of the occipital, posterior auricular, and supra-orbital were divided, together with a number of large veins. Thirteen hemp ligatures were applied, and the edges of the wound brought together with silk stitches, except in the middle, where there was a deficiency of skin. The patient lost a good deal of blood, vomited his breakfast, and felt a little faint at times during the operation, when he took a little brandy, the total quantity amounting to about an ounce. The wound was dressed with pads of dry lint and cotton-wool, kept in position with a firmly applied roller. After the dressing the patient felt no pain, and when put to bed complained of hunger. The tumour weighed four pounds, and measured eight inches by six inches. It was composed of three lobes, each lobe being contained in a distinct capsule. On section the upper and largest lobe was seen to be yellow, and composed of fibrous and fatty tissue, with patches of caseous degeneration, and small cysts containing serum scattered here and there. The middle lobe was only about one-fourth the size of the upper lobe, much darker in colour, approaching that of muscle. The lowest lobe was of about the same size as the middle one, and of a paler tint. At 5 P.M., about six hours after the operation, patient's pulse was 92, and he was free from pain. He slept well; there was no bleeding, and no pain. Pulse 104.

On the 16th the dressing was removed, and a slight swelling, due to the presence of blood and serum, was found. The bandage was replaced. He had great pain during the night.

On the 17th, at 4 P.M., the wound was dressed, and all the stitches were removed on account of the great tension. There was a good deal of oozing. Pads of lint soaked in carbolic oil (1 to 10), cotton-wool and firm bandage were applied.

On the 19th, at 4 A.M., Mr. Maclean was called by the infirmary man because patient had lost a great deal of blood, and had fainted. The patient was insensible, almost pulseless, and the bed and floor were covered with blood. The wound was opened up, and a large quantity of firm clot turned out. It was then found that the bleeding was for the most part parenchymatous. In the process of turning out the clots several ligatures were torn away, and in one case, on account of the soft pulpy state of the tissues, an armed needle had to be passed in deeply, so as to surround the bleeding point. The wound was then dried piece by piece with lint, the drying of each piece being immediately followed by the application of a strong solution of perchloride of iron. There were now fifteen ligatures. The wound was dressed with lint dipped in carbolic oil, and a light bandage was applied. During the day the pulse ranged over 120, and the patient was constantly sick after the smallest quantity of food till the afternoon. On questioning the infirmary man, it came out that Hassan was very proud of his strength, and from the very day of the operation had been in the habit of getting out of bed and sitting up, and in this way, no doubt, had succeeded in preventing the proper closure of the bloodvessels.

On the 20th the pulse was 134. The patient was very pale, complained of bad smell from the wound; fresh carbolic oil was applied. Patient had been thoroughly frightened, and now kept very quiet. Next day he was better, and pus ran freely from the wound.

On the 27th the wound was granulating healthily. Pulse 88.

On March 1st patient was looking well. Sweated at night, but felt strong. Pulse 96.

On the 15th patient was in very good health, and was discharged, as the hospital had to be closed in consequence of the termination of the season. The wound was a healthy, superficial, granulating sore of oval shape, measuring in length eleven centimetres, in width at the middle seven centimetres, and four centimetres in width at the junction of the middle with the upper and lower thirds. There was still some deformity about the right eye due to the loose and relaxed condition of the connective tissue under the orbicular muscle, and the position of the pinna was a little faulty. This, however, will probably be corrected by the cicatricial changes, and so far from the deficiency of skin covering at the time when the tumour was removed being a loss, it is a positive advantage, helping to restore the symmetry of the patient's face.

Remarks.—The points of interest about the above case are: 1. The large size of the tumour. 2. The performance

of the operation without anæsthetic. Apropos of this, it is worth mentioning the fact that, as a rule, the Egyptian Arab is endowed with great passive courage. This has perhaps partly resulted from the lavish use through many generations of the kurbág or hippopotamus-hide whip in collecting the taxes. The reward of him who bears his lashes manfully being his escape from the payment of money. Moreover, the women value a man according to his power of bearing blows. Another remarkable circumstance in Egypt is the comparative absence of squalling and crying children. In playing amongst themselves children often submit to things that would certainly cause an English child of the same age to utter an expression of pain. These facts show that the sense of pain in the Egyptian Arab is much less than it is amongst Europeans. An exception has to be made in the case of hasheesh or opium smokers, both of whom bear pain very badly. 3. The occurrence of intermediary hæmorrhage. That this hæmorrhage, though so severe, came from no single bleeding point and was completely controlled by the application of perchloride of iron. 4. The occurrence of vomiting during the operation although no anæsthetic was used. This was due to a syncopal condition, and suggests that some of the cases of vomiting put down to chloroform may be due to the shock inflicted by loss of blood. 5. The vomiting recurred on taking food into the stomach after the patient suffered from intermediary hæmorrhage. Can some of this vomiting have been due to the absorption of perchloride of iron by the wound, or was it all due to the syncopal condition?

Reviews and Notices of Books.

De la Méthode Sanglante dans les Rétrécessements de l'Uréthre. Par le Dr. W. GRÉGORY, Ancien Interne de l'Hôpital Saint-André, Prosecteur de la Faculté de Médecine de Bordeaux. Paris: Adrien Delahaye et Cie. 1879.

Précis Clinique des Affections des Voies Urinaires chez l'Homme. Par le Dr. CHRISTIAN SMITH, Bruxelles. Tome premier: Anatomie, Urologie, Affections de l'Uréthre. Paris: A. Delahaye et Cie. 1880.

The Pathology and Treatment of Venereal Diseases. By FREEMAN J. BUMSTEAD, M.D., LL.D. New York. Fourth Edition, revised, enlarged, and in great part re-written by the Author, and by ROBERT W. TAYLOR, A.M., M.D., Professor of Skin Diseases in the University of Vermont. With 130 Woodcuts. Philadelphia: Henry C. Lea. 1879.

THE three works at the head of this notice differ very much in their plan and scope, and yet in the ground they cover so overlap that it is convenient to group them together for the purposes of reviewing.

Dr. Grégory's essay commences with a long and full account of the history of urethrotomy, in which he traces its origin, the way it then fell into disfavour, and its ultimate re-establishment as a sound operation. A number of cases occurring in the Saint André Hospital at Bordeaux are then detailed, and cases and statistics published by British, Continental, and American authors are added, and from these the author draws a comparison between internal and external urethrotomy. The entire purport of the essay is to show that the perineal operation should replace the intra-urethral one in all strictures requiring incision which are not in the penile portion. Dr. Grégory has been at great pains to obtain all the statistics calculated to facilitate the comparison between the two operations in their results, and although we cannot but be struck with his evident bias in favour of the external operation, the facts he gives enable his readers to form their own conclusions, and they are a formidable indictment against internal urethrotomy. In 915 cases of internal urethrotomy there were 46 deaths, or about 5 per cent., and of 992 cases of external urethrotomy there were 88 deaths, or nearly 9 per cent., but Grégory maintains that the operation is only responsible for a mortality of 3 per cent., while the internal section, when similar deductions are made, has a fatality of 4¼ per cent. But further than this, we are assured that Listerism will deprive the perineal section of all its terrors, and render it quite innocuous, by guarding the patient from his chief danger—blood-poisoning. When the question of mortality is put aside it is an easy task to show that the complications of the internal operation are both formidable and frequent; we drew attention to this subject some few years back as illustrated by the University College Hospital statistics. The French cases afford numerous instances of urinary fever, profuse hæmorrhage, urinary infiltration and abscess. As to the ultimate benefit conferred, it is maintained that while recontraction is the exception after external, it is and must be the rule after internal urethrotomy, even when the section of the stricture is complete. We doubt if either operation need be praised by condemning the other. Is it not more just to state that each is useful in its own peculiar field, and that it is by combining them in our practice that we shall best be able to appreciate their value? We hold, for example, that Syme's operation can never replace the intra-urethral section in strictures in the penile urethra, and we must refuse to assent to the proposition that would teach us that because internal urethrotomy is well suited to strictures in that portion, it must be the best method of attacking those in and near the bulb. Unfortunately internal urethrotomy at present is practised too exclusively by specialists, who are often prone to follow out some special line of practice, and are less able than general surgeons to estimate rival (?) treatments at their proper worth. We must wait longer before in this country we can discuss Dr. Grégory's proposition without prejudice, but his brochure will do good service in drawing attention to the merits of the external and the risks of the internal operation.

Dr. Smith's *précis* is a careful readable *résumé* of our knowledge of the diseases of the urethra. As an Englishman he has, of course, made himself well acquainted with the work of British authors, and throughout his pages constant reference is made to their writings. Like other modern authors—and amongst them Bumstead and Taylor—he is at pains to combat the time-honoured notion of the specific nature of gonorrhœa. The evidence adducible on this point is convincing. The history of the establishment of this apparently simple fact is very instructive, for it shows how long it takes to counteract the mischief done when a great man makes a mistake. Hunter wrote of gonorrhœa as a variety of syphilis, and it was long before it was clearly and conclusively separated from it, and it is only lately that this error has been quite dispelled, and the disease declared to be a simple local affection.

Bumstead's work is already classic and hardly requires reviewing. This edition is well up to date, and everywhere bears marks of careful and erudite preparation. Not only is gonorrhœa claimed to be a "simple" affection, but evidence is adduced to show that "chancroid is distinct from syphilis," that "it does not depend upon a specific virus of its own, incapable of being generated *de novo*," and that, although commonly produced by inoculation of discharge "from another chancroid, it may arise, especially in persons debilitated from any cause, from inoculation of the products of inflammation either simple or syphilitic, and subsequently perpetuate itself from one individual to another as a chancroid." The confusion of chancroid with syphilis has been so widespread and disastrous that we are glad to draw attention to Bumstead's very clear statements and evidence on this point. In this connexion, too, we may note that the specific nature of gonorrhœal rheumatism is rejected by our authors. They refuse credence to Otis's statements about the frequency of spasmodic stricture of the urethra, for they do not believe in spasm lasting through years. The chapters on syphilis are very good, and are the

most valuable part of the work, which altogether must take first rank among the works in the English language on venereal diseases.

Bristol Royal Infirmary Reports. Vol. I. 1878-79. Bristol: J. W. Arrowsmith.

WHILST it is a pleasant duty to welcome every new effort at extension of medical and surgical research, it is none the less incumbent upon the critic to temper his congratulations with a word of warning. It may not always be an easy matter to collate essays of the style and character contained in this first volume, and with every good wish for the successful issue of the enterprise, it is impossible not to feel a little misgiving at the prospect of its maintaining the high standard of excellence assumed. The volume, it may be gathered from these forebodings, is an ambitious one. It is based on the plan so familiar to us in Guy's, St. Bartholomew's, St. George's, and those Reports that used to issue from the London hospitals, the very excellence of which made one feel their extinction all the more deeply. We have numerous essays, many of great interest, from the pens of members of the infirmary staff, a few records of interesting cases, and a much condensed statistical summary of the cases under treatment during the years 1878 and 1879. There are two separate papers on diseases of the spinal cord. Dr. Long Fox contributes an able summary of the present state of knowledge on the subject of Acute Myelitis; and Dr. Shingleton Smith, in an excellent essay, discusses Spinal Sclerosis, which he illustrates with the careful and elaborate notes of cases observed by him in the infirmary. Then follows an original and painstaking paper on Chronic Osteo-Arthritis, by Mr. Greig Smith, full of careful histological details, abundantly illustrated by drawings. The subject is one about which so much obscurity rests, that this contribution to its minute pathology will be welcomed. The same writer also contributes a paper on the Mode of Growth of Spicular Osteophytes, and in these two essays he shows himself to be a careful student in the difficult path of osteal pathology. A pleasantly-written paper, by Dr. Beddoe, on the Progress of Public Health, and a somewhat discursive but most ingenious essay on Fever as a connecting link between Scrofula and Tuberculosis, is contributed by Dr. W. H. Spencer. A melancholy interest attaches to the two papers which follow; they are the records of the rare diseases which deprived Bristol of two of its most able workers—Mr. Crosby Leonard and Dr. R. W. Tibbits,—the former, contributed by Drs. Fox and Shingleton Smith, being a case of Myelitis, the latter, by Dr. Brittan, one of Thrombosis of both Middle Cerebral Arteries. The medical superintendent, Mr. Lee Macintire, gives a report upon Ethidene Dichloride as an anæsthetic, from which it would appear that the administration of this compound, although productive of less cardiac depression than chloroform, was attended by more vomiting and other distressing sequelæ that somewhat detract from its advantages. Several surgical and medical cases of interest are given in full, and obituary notices of Crosby Leonard and William Budd close the literary matter of a volume, upon the excellence of which the Bristol Infirmary is to be congratulated.

Martin's Atlas of Obstetrics and Gynecology. Translated by FANCOURT BARNES, M.D. London: H. King Lewis.

MARTIN'S Atlas consists of a series of lithographic plates with letterpress, which is not descriptive but explanatory. The plates are in great part selections from the works of various authors in England and on the Continent, while a certain number are original to the author. The value of such a work will depend upon two things—the judgment used in the selection and the clearness and accuracy of the drawings. On the whole we think the author has exercised a sound judgment in the selections he has made; but he has fallen into one error at least—namely, the introduction of diagrams. Diagrams may be and often are of the greatest value in illustrating and making clear views and opinions, but they may be true or not true, and in a work of this kind nothing should be introduced but what had been copied from nature. The editor has perpetuated this error, and has moreover fallen into a second—namely, the introduction of copies of photographs. Photography has been employed for the production of illustrations in several departments of medicine, but in so far as we know without much success. Winckel's photographs of pathological conditions of the female pelvic organs form no exception, and the plates of these photographs introduced into the second edition of this work want clearness and definition, and convey no accurate idea of the subjects represented. The translator has added four plates of wood engravings. Some of these are diagrams, and consequently of little value; others, again, are from nature: all are poor specimens of the art of wood engraving. Why the drawings of instruments at the end should have been added we fail to understand. The translator has done his work fairly well on the whole. His chief fault has been a too close adherence to the original.

The Quarterly Journal of Microscopical Science. April and July, 1880. Nos. LXXVIII. and LXXIX. Edited by E. RAY LANKESTER. London: J. & A. Churchill.

THE seventy-eighth number of this journal contains the following memoirs:—1. The Coffee-leaf Disease of Ceylon, by Thiselton Dyer. 2. On Shepheardella—a new Rhizopod, by J. Siddall. 3. The Development of the Kidney in relation to the Wolffian body in the Chick, by Adam Sedgwick. 4. The Development of the Araneina, by F. M. Balfour. 5. The Biology of Bacteria, by Waldstein. 6. Some Teachings of Development, by E. Schäfer. 7. The Histology of Hydra fusca, by T. Parker. 8. The Orthonectidæ, by Alfred Giard.

The seventy-ninth number contains—1. A Chapter on the Structure and Homologies of the Germinal Layers of the Embryo, by F. M. Balfour. 2. Hubrecht's Researches on the Nervous System of Nemertines. 3. The Structure of the Nephridia of the Leech, by G. Bourne. 4. On Intra-epithelial Capillaries in the Integument of the Leech, by Ray Lankester; and by the same author a Memoir on the Connective and Vasifactive Tissues of the Leech. 5. On the Use of the Wenham Binocular, by Heneage Green; and by the same author a paper on the Structure of the Human Spermatozoon. 6. Some points in the Morphology of Echinoderms, by Herbert Carpenter. 7. On the Origin of the Red Blood-corpuscles, by Pouchet. And, lastly, a paper on the Limnocodium Sowerbii, by Ray Lankester.

The economic importance of Mr. Thiselton Dyer's observations is considerable. The parasitic fungus which has devastated the coffee plantations of Ceylon and Southern India is now slowly spreading eastward through the coffee-growing countries of the Old World, and any inquiries which may lead to the discovery of the means of arresting its progress are deserving of encouragement. The pest proves to be a fungus, named by the Rev. M. J. Berkeley Hemileia vastatrix, the mycelium of which spreads over the leaf, destroying its vitality, and impairing consequently the productivity of the tree. The mycelium can be destroyed, and the tree saved, by the application of sulphur at an early period of the growth of the fungus. Prof. Ray Lankester's paper describes in considerable detail the singular medusa that has been found in the Victoria Regia tank of the Botanical Society's Garden, Regent's-park. It is a most active and energetic little creature, whose vigorous movements rivet attention, and it proves to be a fresh-water form, hitherto unknown, of the trachomedusæ—creatures having the genital sacs or gonads placed in the course of the radial canals.

RECENT INVESTIGATIONS ON THE ACTION OF DRUGS.

AN interesting contribution to the facts relating to the antagonism between the actions of drugs has been supplied by Pantelejeff with regard to two drugs in common use—quinine and atropine. The salts employed were the chloride of quinine and the sulphate of atropine, and the experiments were made upon dogs, rabbits, and frogs. An injection of quinine beneath the skin of a frog in summer arrests the heart in diastole; but a subsequent subcutaneous injection of atropine causes it at once to resume its pulsations. The appearance of the heart, when its action is arrested by quinine, is as if the blood-pressure on the heart was greater than the cardiac walls could contract upon. If atropine was injected first, so as to cause an acceleration, this was arrested by the quinine. With winter frogs the effect of the quinine was more frequently to cause a gradual retardation in the action of the heart, which was only arrested, after a time, with loss of reflex action, and death. The injection of atropine did not prevent this, but retarded the heart still more. Microscopic examination of the vessels of the web of the foot showed that the quinine caused a narrowing of the small arteries to one-half of their previous calibre, while atropine dilated the vessels. In rabbits it was found that when the heart's action was arrested by quinine, atropine caused it again to beat, and the auricles began to contract before the ventricles. In both dogs and rabbits the blood-pressure in the carotid rose after the injection of quinine, when the pulse was rendered less frequent. It was found that immediately after the injection the blood-pressure suddenly falls, but after a few seconds it rises to a higher degree than before the injection. In small doses the pulse is often accelerated during the increased pressure, but with large doses the pulse is retarded from the beginning. If repeated injections are made, every injection causes first a sudden fall of pressure, with retardation of the pulse; then the pressure rises, to fall again after a new injection. This initial fall in the blood-pressure is probably due to a sudden contraction of the vessels of the lungs, hindering the passage of the blood into the left ventricle and the aorta. The cardiac contractions become at the same time less frequent, but stronger. The arteries of the aortic system then contract, and cause an increase in the blood-pressure, and at the same time an acceleration of the pulse. Larger doses have a direct influence on the heart, so that, later, the cardiac action becomes retarded, and the blood-pressure falls. The pneumogastrics remain excitable by electricity, but their division exercises no marked influence upon the pulse, especially when the respiration is retarded by the action of quinine. Subsequent injection of atropine accelerates the pulse, even when the pneumogastrics have been divided. In only one observation upon dogs was an arrest of the heart by quinine prevented by atropine. The increase of pressure caused by quinine was disturbed and retarded by the preceding injection of atropine. Direct application to the heart of frogs showed that not only can quinine arrest the action of the heart, but that it can also, under certain circumstances, act as a stimulant to excite it to action, and the effect depends upon the condition in which it is.

The acute effects produced by large doses of atropine have often been studied, but the symptoms which are produced by such doses as are toxic only when long-continued have been little investigated. They have, however, lately occupied the attention of Dr. von Anrep in the physiological laboratory at Würzburg. If a dose of one to three milligrammes is administered to a dog by hypodermic injection, the slight symptoms which it causes—mydriasis, &c.—soon pass away. If the injection, however, is repeated, the effects gradually become less intense. After the fifth injection the slight modifications of the cutaneous sensibility, and the slight muscular tremors which are caused by the first doses cease to occur, the slight acceleration of the action of the heart is less marked, and the animal maintains its usual health in spite of the continued doses. Chronic poisoning with larger doses gives more persistent results. A single dose of one-twentieth of a gramme causes symptoms of acute poisoning—muscular spasm, vomiting, thirst and loss of appetite, transient acceleration of the pulse, extreme dilatation of the pupil, quickened respiration, and a slight elevation of temperature. If this dose is repeated on six or ten successive days the symptoms become slighter after each injection, with the exception of the dilatation of the pupil, the acceleration of the action of the heart, and the diminution in the saliva. There is no trace of muscular spasm or tremor. After a long time the heart becomes weakened, its contractions are less frequent, being only one-half of the normal, and the effect of each new dose is to cause only a slight acceleration. From these experiments it appears that a remarkable tolerance is established to the alkaloid, even in considerable doses, so that, after a time the animals are unaffected by doses which would have been fatal at the outset of the experiments; but this tolerance is least in the case of those organs and structures which are normally the most impressionable—namely, the pupil and the pneumogastric nerve. If, after several weeks' poisoning, the administration is stopped, the heart returns to the normal condition in from three to five days. It is suggested that the *modus operandi* of atropine on the heart is as follows: The first doses act exclusively upon the pneumogastrics; the excito-motor ganglia and the muscular tissue of the heart resist the action of the poison, and are only affected by repeated doses: hence the persistence of the retardation which succeeds the initial acceleration.

The same investigator has studied the action of cocaine, the active principle of the coca-leaves. He draws the conclusion that cold-blooded animals are more sensitive to its action than warm-blooded animals. Its chief action appears to be upon the nerve-centres. In frogs, it first paralyses the terminations of the sensitive nerves, and afterwards abolishes reflex action. In the mammalia, it first stimulates all the nerve-centres, and especially the psycho-motor centres. This general excitation is followed by a slight enfeeblement. Small doses increase reflex action; large doses do not paralyse it entirely, as in the case of the frog. Respiration is quickened, except by fatal doses. In frogs the power of the heart is lessened so as to lead to arrest in diastole. In mammalia the heart's action is accelerated, and strong doses are necessary to cause a retardation. The blood-pressure is increased by the stimulation of the vaso-motor centres; large doses should naturally have the opposite action, and lower the blood-pressure. The inhibitory nerves of the heart are readily paralysed by medium doses. The striated muscles are not directly influenced by cocaine. The pupil is dilated by it, and as powerfully by the internal use of the drug as by its instillation into the eye. The peristaltic movements of the intestine are accelerated. Acute poisoning by cocaine causes muscular spasms, and, in consequence, an elevation of the rectal temperature; when there are no convulsions the rectal temperature falls. The secretion of the several mucous membranes is lessened. Certain motor disturbances can only be explained by the assumption that cocaine has an action upon the semicircular canals; the symptoms suggest that the drug modifies the pressure of the endolymph in the internal ear, and thus effects a stimulation of the terminal filaments of the auditory nerve. Death appears to result from asphyxia, caused by respiratory paralysis, the heart continuing to beat for some minutes after apparent death.

The action of cyanogen has been the subject of an experimental study by R. Bunge, at Dorpadt, with frogs. He was unable to observe any convulsive phenomena, and the paralysing effect was produced slowly, even with large doses. If the animals were examined after a few minutes' exposure to the action of the gas, the cutaneous sensibility was found to be lessened or abolished, and their movements were considerably lessened. During the first few minutes of the exposure the animals were restless from the local irritation, their movements then became slower and less frequent, the respiratory and cardiac action ceased, and rigor mortis set in with great rapidity. The latter, indeed, sometimes commenced in the hind legs while respiration was still going on. Post-mortem examination showed the heart to be dilated and filled with pale blood, in which the spectroscope revealed the absorption bands of oxyhæmoglobin. If the blood-supply to a limb was cut off, the rigor mortis appeared in those muscles somewhat later than elsewhere. If, however, a limb was entirely separated and exposed to the action of cyanogen gas, the cadaveric rigidity rapidly appeared in it. If the heart was exposed, the ventricular contractions were seen to become less frequent and more feeble, and the irritability of the cardiac muscle to mechanical stimuli was soon lost. This was, however, preceded by a transient

acceleration of the frequency of the heart's action, which the experimenter refers to stimulation of the cardiac ganglia, or muscle substance. That it is not due to any action on the vagi is shown by the fact that, if muscarin is first applied so as to arrest the action of the heart, the stimulating effect of the cyanogen can still be observed. The chief difference between the action of cyanogen and hydrocyanic acid consists in the persistence of the respiratory movements after the heart's action has ceased, and in the early occurrence of the rigor mortis. In the mammalia, cats, rabbits, and mice, the cyanogen gas, whether inhaled or injected in watery solution into the blood, causes dyspnœa, and the animals die from respiratory paralysis, just as after poisoning with hydrocyanic acid. The blood-pressure falls, and the heart's contractions are at first rendered more frequent, but in the later stage are retarded. They continue after respiration has ceased. The toxic effect of cyanogen is less violent than that of hydrocyanic acid, ·02 grm. being required to produce the same effect as ·004 grm. of the latter.

THE VETERINARY DEPARTMENT OF THE PRIVY COUNCIL.

THE Annual Report of the Veterinary Department of the Privy Council, lately issued, must be pronounced, on the whole, satisfactory; in some matters unsatisfactory. It shows that, notwithstanding the opinions which at one time dominated this department, the severe scourges which have done such damage to our agriculture, and were allowed to ravage the pasture and farmstead for so many years unchecked, can be exterminated without injury or inconvenience to the general public. Since our ports were thrown open to the unrestricted importation of foreign animals, some forty years ago, exotic contagious diseases of the most destructive character have been permitted to run riot over the country, and the loss to the farmers, which means also a national loss, must have amounted to several millions of pounds annually. Much ignorance seems to have prevailed with regard to these diseases, and Government of late years appear to have only become slowly enlightened with regard to them. Their history, geographical distribution, nature, and even their transmissibility, seem to have been but little known. Hence the neglect of repressive and sanitary measures until the cattle plague visited the country, and caused such havoc in 1865. The awakening was a rude and a costly one, and a kind of system of checking that, and one or two of the other contagious diseases, was forthwith inaugurated. But it must be confessed that the Government has moved slowly, and has often indeed been a long way behind public opinion; it has had to be urged to adopt the simplest and most elementary measures, and only too often it has shown itself strangely ignorant of the prevalence and mode of combating diseases regarding which there should have been no doubt or hesitation. This was the case until 1877, when another invasion of cattle plague—quite unexpected, and therefore unprovided for—visited England. It was then somewhat roused out of its torpidity and driven into more vigorous action by the report of a Select Committee of the House of Commons, and in 1878 the Contagious Diseases (Animals) Act was passed. Since then the chief pests which had for so long wrought incalculable mischief have been gradually extinguished, though not nearly so rapidly as would have happened had the Act been properly framed and the measures energetically carried out. However, at last foot-and-mouth disease has been nearly got rid of, and contagious pleuro-pneumonia is greatly diminished, though far from being extinguished. It is somewhat singular that, in view of the persistency of the last-mentioned disease, the Government should ignore the benefits to be derived from protective inoculation. It is painful to read of the destruction of entire herds of cattle, only one or two of which are diseased, without this measure, the benefits of which are now placed beyond doubt, being at least tried. There is yet much torpidity, incredulity, and apathy exhibited, and we trust that the new Government may contrive to effect the removal of these barriers to improvement in this matter of contagious diseases among animals. The Act now in force is faulty in several particulars, and we shall probably have to suffer yet for many years from these disorders, unless more enlightened and efficient action is adopted.

Glanders among horses is on the increase, and the returns evidently do not represent a tithe of the cases occurring. Everything appears to be left to chance with regard to this dangerous disease; there is no compulsion in the matter of reporting the existence of the malady, nor yet any attempt to trace the source of those cases which are reported. Considering the risk human beings incur, and the loathsome and incurable character of the disorder, surely the public have a right to expect better protection from it.

From the report before us we observe it is stated that foot-and-mouth disease was detected among sheep imported from the United States; yet, strange to say, from all we can learn the disease is now unknown there. Surely a mistake has been committed.

American swine are largely infested with trichinæ, yet nothing is done to protect the pork-eating public from this source of danger.

Though the report is satisfactory to some extent, yet it bears on the face of it signs of lassitude, and a tendency to allow things to go as they may. No account is taken of that terrifying and far from rare disease, rabies; nor is any mention made of anthrax—a malady of rather rare occurrence—but very fatal in different parts of the country, and being transmissible to various species of animals and man, it should, we think, secure some share of attention from the authorities. Tuberculosis of cattle, also, is unmentioned, though the disorder is rather rife, and is apparently on the increase. We wonder if the Government has heard of it, and of the recent startling disclosures made with regard to its communicability, not only by inoculation, but by ingestion of the milk and flesh of diseased cows, as well as its infectiousness through the respiratory organs! It is indeed high time something was done to keep the Government up to the level of sanitary requirements; it should lead, not follow public opinion.

STATISTICS OF FATAL CHOREA.

To the Editor of THE LANCET.

SIR,—I can add six to the eighty fatal cases of chorea brought together by Dr. Sturges in his interesting paper published in THE LANCET, July 17th. No single observer can contribute many. All my patients died *of* chorea, not merely *with* it. The cases came under my notice when I was resident physician in the Queen's Hospital. I watched them closely during life, and I examined all the bodies post mortem.

CASE 1.—Selina W——, aged fourteen years, died Nov. 30th, 1866. Death by asthenia. Tænia mediocanellata in small intestine.

CASE 2.—Sarah J——, aged eighteen years, died April 2nd, 1867. Death by syncope. Suffering from gonorrhœa. She was much perturbed about the venereal disease, and was very anxious to conceal it from her mother.

CASE 3.—Emily C——, aged fifteen years, died May 19th, 1868. Death by asthenia, after illness of seven days. Malady attributed to dread of destitution; she had neither relatives nor friends, and had been about to lose her situation.

CASE 4.—James N——, aged sixteen years. Died March 11th, 1870. Death by asthenia. Chorea lasted six weeks, and followed acute rheumatism. Tænia solium in small intestine.

CASE 5.—Emma H——, aged twelve years. Died Dec. 27th, 1870, ten days after the onset of chorea. Her illness began as acute rheumatism; when the joint affections and pyrexia were subsiding the choreic movements began. Endocardium normal.

CASE 6.—Sarah P——, aged twenty-five years. Died March 7th, 1871, by asthenia. Was delivered of a dead six-months' fœtus, forty-eight hours before death; her second pregnancy. She attributed the chorea to fright and bad food.

These cases, so far as they go, support in the main Dr. Sturges' conclusions. The points worthy of note in my cases are—(1) the ages of the patients (twelve, fourteen, fifteen, sixteen, eighteen, and twenty-five years respectively); (2) the sex of the patients (five females, but only one male); (3) the association of acute rheumatism, emotional disturbance, intestinal worms, and pregnancy, with chorea.

I am, Sir, your obedient servant,

Birmingham, July 15th, 1880. JAMES SAWYER, M.D.

THE LANCET.

LONDON: SATURDAY, JULY 31, 1880.

ANOTHER deputation has interviewed the President of the Local Government Board on the subject of the Vaccination Acts Amendment Bill, and the arguments repeatedly and ably urged against the measure have been again propounded. The novel feature of the appeal was the reading of a letter from Sir WILLIAM JENNER, which must be characterised as a singularly perfect and persuasive specimen of the *reductio ad absurdum*. After expressing an opinion that the Bill is so absurd that it is scarcely possible to conceive it will become law, Sir WILLIAM JENNER suggested:—"Instead of a fine of 20*s*., if Mr. DODSON determines to carry his measure would it not be better that anyone should have a licence from the Inland Revenue officer to go unvaccinated? Then one would get a licence at the same time that one got a licence for dogs, horses, &c. This certainly would be more simple, and would in time yield a revenue to the State. Licences also might be granted, for a suitable sum, for drunkenness, &c., and then people would not be fined as often as they now are 5*s*., I think. If a man paid 20*s*. at the beginning of the year he would have a season ticket for drunkenness, and a season ticket for spreading small-pox." The merit of applying this line of argument to the question may be claimed by our contemporary the *St. James's Gazette*, which adopted as a title for one of its earliest articles on the subject, "Small-pox for Forty Shillings"—in view of some recent magisterial decisions, the overture might now be made at the insignificant sum of sixpence,—but Sir WILLIAM JENNER'S use of the same weapon is more complete and convincing. If anything can kill the Bill this description of onslaught is certainly likely to be successful. The President of the Local Government Board was palpably hit, and winced. It is scarcely possible that the measure can survive, and few will mourn its decease.

Meanwhile it must not be forgotten that precisely the same confusion of thought was occasioned, and the same fears were stirred, by the proposal to reduce the penalty for stealing below the magnitude of capital punishment. It was alleged that the promoters of the relief were favouring the offence, and that by diminishing the penalty they would increase the crime. Events have not justified that anticipation. Nor do we think the erasure from the statute book of a punishment which is seldom inflicted, and never with good results, would have the effect of discouraging vaccination. If we had the smallest misgiving on that point we should join the outcry against the Bill. We yield to none in our support of vaccination. If anyone will bring in a Bill to make the Vaccination Act *directly* compulsory, it shall have our warmest support. We have gone, and still go, further than the most ardent promoters of these repeated deputations to the President of the Local Government Board, and assert the need of an Act of Parliament making *revaccination* compulsory! Nevertheless, we fail to see the practical use—while the evil is self-evident—of maintaining a law which cannot be put into execution, for the extraction of multiple fines from the pockets of the obstinate few who decline to obey the law and to have their children vaccinated, seeing that even when the fines are enforced the children remain unvaccinated.

The Acts making vaccination compulsory have been in operation now for a considerable number of years. The machinery has been inadequate and works with a great deal of friction. The local officials in charge of the detailed application of the system have in many instances done little to assure its success. For example, it is scarcely less than a scandal that animal vaccination has been so long delayed, and it is now simply provoking to hear the President of the Local Government Board tamely stating that he has "undertaken, on behalf of the department, to give facilities for obtaining animal lymph in the same way as humanised lymph is now obtained"! When will the official mind be brought to see that sitting calmly in a chair and "giving facilities," whatever that may mean, is a miserable burlesque of business unworthy an intelligent administration, even in connexion with a "department"? It is the simple duty of the authorities acting under the supervision of the Local Government Board to *supply* the lymph, not to give "facilities" for obtaining it. If they cannot or will not do this, then it is the public and official duty of Mr. DODSON to see that it is done by some power and in some way instantly! It will be no answer to this remonstrance to say that calf lymph cannot be obtained. It *has* been possible to obtain calf lymph, and it is possible, if the "department" will act, instead of giving "facilities." Money is needed of course, but the President of the Local Government Board is now bound by the use he has made of this pledge with regard to calf lymph, in reply to the deputation, to go boldly to the Treasury and ask for the sum necessary to enable him to carry out his intentions and give the "facilities" he has promised; and the Treasury stands pledged to the country to supply the funds required. It is by the combined action of "red tape" and this policy of letting matters drift, good laws are allowed to fall into abeyance, and agencies well adapted to render excellent service in the public interest are permitted to lie idle. It is impossible to avoid a feeling of irritation as we read the feeble reply of the President of the Local Government Board to the powerful arguments brought to bear against him. He succumbed with the childish complaint that the opposition he has encountered was unexpected. If this be really the fact, it argues little for the prescience of the "department." Nothing but opposition could be encountered by such a measure. If those who framed it had been gifted with only a very moderate share of the statesmanly instinct, they would have introduced *direct* compulsion with one hand, while with the other they wiped out the blot of an impotent penalty.

The need of the moment is the substitution of an Act of Parliament making vaccination compulsory for one which practically only makes non-vaccination grievous. The policy of the latter form of enactment is not wise or far-sighted. It tends to the making of martyrs rather than enforcing the practice it enjoins. Those who respect the

law obey it for its own sake, and will obey it still; while those who assume a defiant attitude now do so with the *éclat* which results from the high price of the luxury of disobedience. We are of course speaking of the working of the law in districts where it is honestly administered, not in localities where it is levelled down to the views of the "anti-vaccinationists" by a feeble or prejudiced magistracy! If the law-breaking of the anti-vaccinationists is shorn of its financial glory as an expensive form of crime, and allowed to fall into the ranks of the contemptible offences for which the impecunious may be mulcted, we do not think the law will lose in dignity by the change. Meanwhile the questions in which we are interested, and upon which neither the arguments adduced by these deputations to the President of the Local Government Board, nor the utterances of that Minister—who, it should be remembered, is a member of the Cabinet, and in a special sense speaks and acts for the Government,—throw any light, are: What steps is it proposed to take with a view to make the observance of vaccination absolutely compulsory—an obligation of good citizenship, which can neither be avoided nor allowed to remain unfulfilled? The arguments urged against compulsory vaccination would of course have applied with equally cogent force against the law enjoining circumcision. What is good for a nation must be enforced on all its members. And what is to be done about *revaccination* and the use of lymph obtained direct from the calf? When yet another deputation waits on Mr. DODSON, perhaps these practical queries may be deemed worthy of the attention they seem to us to demand.

A MEMOIR by POUCHET which has recently appeared in the *Revue Scientifique*, and which has been translated in the current number of the *Quarterly Journal of Microscopical Science*, discusses the interesting subject of the mode of production of the red blood-corpuscles. It is not a little remarkable that the origin of the formed elements of the blood should still continue to be a matter of hypothesis, and that physiology is incapable of replying to the question, How after large losses of blood is its restoration effected? The present generation of practitioners are hardly aware of the quantity of blood that was taken from patients in acute disease by the physicians and surgeons of the past age. If works written in the early part of the present century are referred to, some surprising facts of this nature will be found. At the time when Sir W. LAWRENCE's treatise on the Venereal Diseases of the Eye was published—that is, in 1830—bleeding was the approved method of treating gonorrhœal ophthalmia; and amongst other cases he records in that work there is one of a pugilist, who was no doubt an athletic, freely-living man, but who, having contracted gonorrhœal ophthalmia, was admitted into St. Bartholomew's Hospital, and from whom the surprising quantity of one hundred and fifty-two ounces, or nearly eight pints, reckoning twenty ounces to the pint, were abstracted by venesection, besides the application of thirty-two leeches, in the short space of one week. Nor was this a solitary case, for several others are recorded in which nearly equal amounts were taken. It is worth noting that the pugilist recovered with perfect vision. In the case of women, again, enormous losses of blood are often sustained in menorrhagia, which are yet quickly restored under favourable circumstances. RINDFLEISCH has made an estimate of the rapidity with which the reproduction of new corpuscles must take place in ordinary intermenstrual periods, and calculates that half a centigramme of blood is produced every minute, which means that about one hundred and seventy-five millions of red blood-corpuscles are produced every minute. When thus reduced to figures, it seems extraordinary that no answer can be given to the questions how and where this enormous proliferation is effected.

Is the process of renewal performed in some obscure organ whose function has been overlooked—the suprarenal capsules or thymus or thyroid gland, for example,—or is it that the corpuscles, similar as they may all appear to our methods of investigation, are derived from many different sources, each set having its own special and definite functions, and differing in structure, purpose, and destination from all the rest? The results of modern physiological research seem to point in the latter direction. Not many years ago the corpuscles were believed to be exclusively derived from the chyle, and HEWSON'S observations, to which Mr. GULLIVER did good service in calling attention, were essentially in favour of the mesenteric glands being the bed for the production of the lymph corpuscles, the nuclei of which acquired colour and became the red corpuscles. More recently, however, the claims of many other parts of the body to be hæmatopoietic organs have been with more or less probability advanced, and the share of the spleen, the liver, the muscles, the cancellous tissue of the bones, and the peritoneum, in the process of blood formation, has been urged by different experimenters. Objections may, however, be raised to nearly every hypothesis that attributes the origin of the hæmatids to a single source. Even in the case of the lymphatic glands it may fairly be urged that they cannot be exclusively concerned in the generation of the red corpuscles, since such glands are wholly absent in fishes; and the same objection may be taken to the view of NEUMANN and BIZZOZERO in favour of the cancellous tissue of the bones. And granting even that they are formed here, by what means do they traverse the walls of the capillaries, and how are they impelled into the current of the circulation? The fact that the spleen is absent in some animals, as the lamprey, and may be removed even in the higher animals and man without rendering them anæmic, disposes of the idea that it does more than aid in the genesis of blood-corpuscles, and, as POUCHET remarks, little weight can be attached to the statements that a new function can be vicariously performed by other organs of a totally different structure.

In regard to the derivation of hæmatids from the lymphoid patches of the mesentery, these regions can evidently play but a small part in the production of new corpuscles. RANVIER has indeed observed hæmatids originating in the midst of vessel-forming tissue. But if this view be correct, the repair of lost blood would be necessarily associated with the production of new capillaries, which has not been demonstrated. The view which is held by M. POUCHET himself, that the real origin of the blood-corpuscles is to be looked for in the hæmatoblasts or minuter form of globules, has been described by HAYEM, and long before him by DONNÉ, under the name of globulins. These bodies pro-

bably originate in the blood plasma, being primarily formed of albumen, to which subsequently the crystalline substance hæmoglobin is added, causing a great increase in the volume of the globulets. In the blood of animals undergoing repair after large hæmorrhages, an extraordinary number of hæmatoblasts or globulets may be observed. These rapidly enlarge in all directions, lose their granular aspect, and become hyaline, and finally assume the discoid form and the yellowish tint of the full-formed corpuscle. The hæmatids are on this view neither cells nor the descendants of cells, but may, like TOPSY, be said to have simply "growed." It would seem that the generation of the red corpuscles is still a dark corner in physiology, and some further observations are still requisite. Is not this a fit subject to be given for the Jacksonian Triennial Prize by the College of Surgeons?

THE unprecedented success of the Metropolitan Hospital Sunday Fund this year is a matter for great congratulation. Exclusive of the balance from last year, the sum raised slightly exceeds £30,000. The excess over last year's collection is nearly £5000. The Lord Mayor, Sir F. WYATT TRUSCOTT, was very properly congratulated on such a result. The entire explanation of it was not very deeply gone into at Monday's meeting. THE LANCET may fairly claim some share of credit for the result obtained. Prejudices have been broken down and information supplied. The clergy had been better supplied with facts on which to base their appeal than on any former occasion, a circumstance which should encourage the Council to a little more effort to procure and to publish information in a clear and intelligible form. Great further good would be done if the principle of distribution could be, if not simplified, classified and made more intelligible to ordinary minds. In a previous year, when there was nearly as much to distribute, the Dispensaries got nearly five hundred pounds more than they are getting under the present awards. Regarding a grant to the Eastbourne Convalescent Hospital, an institution which has never before this year applied for a grant, Dr. GLOVER inquired if the hospital were managed by a committee, as the rules of the Fund require, and was answered in the affirmative, though the committee is not mentioned in the report. Dr. GLOVER then gave the particulars of an astonishing instance in which the Sisters advised a Wesleyan patient to go to the confessional, to connect herself with a "high church" in London, and if necessary leave her family. On the motion of Sir FRANCIS LYCETT, it was unanimously agreed to postpone the grant till the above statements could be investigated. The great glory of the Hospital Sunday Fund is its catholicity—that it is raised by a combined effort of all churches, forgetful, for this high purpose, of all differences of creed. It would be a monstrous thing if, as the churches rise above all petty questions of this sort, the hospitals are to become the arenas of theological dispute and partiality. But there are not wanting indications that hospitals will be converted to this use if care be not taken.

THE death of a patient at Guy's Hospital under circumstances which have led to the committal of a nurse under a charge of manslaughter cannot but be regarded as illustrating the evils of the system of management which prevails at that institution. It is not, of course, for us to say that this patient might not have died under other conditions. "Accidental," involuntary, or unconscious defecation in the recumbent posture is a well-known symptom of meningitis, especially the form known as tubercular, and it may be that the deceased died of a disease which existed *before* she was immersed in a cold bath; but that does not lessen the enormity of a system which permits a nurse to give any patient a bath on the authority of a "sister"—that palpable misnomer for a head-nurse—and without the permission of the physician in charge! The whole system of management at Guy's Hospital bristles with faults of the most astounding character. Can anything, for instance, be more ridiculous than the presumption of a lay Treasurer sitting in judgment on the conduct of a nurse, and affecting to be able to decide whether or not a particular act committed by her was "an error of judgment" or an offence? What can a layman know of the practical rules of treatment in a hospital? Again, how should a "sister" know anything of the fitness of a patient to be bathed? These women sorely need to be taught the limits of their duty, which is *to carry out the instructions of the doctors*. A trained nurse should know how to bathe a patient, but it is not for her to decide whether a bath is required or expedient. There is something radically wrong in the whole scheme carried out at Guy's and, we fear, at other hospitals. If they are to be regarded as institutions where trained nurses are allowed to "treat" cases, this should be understood. It is not tolerable that the sick poor should be induced, under a misapprehension, to entrust their lives to presumptuous and ignorant nursing "sisters," when they think they are placing themselves under the care of skilled and qualified medical practitioners. The issue raised is a very grave one. We are glad to know that it has been brought under the notice of Parliament, and we trust the consideration now bestowed on this matter will put an end to a system of hospital management and nursing, which has sprung up at too many of the hospitals in London and elsewhere, and which, apart from "cases" like this at Guy's, is nothing short of a scandal. Matters have reached a crisis, and the solution of a grave and growing question must not be deferred.

Annotations.

"Ne quid nimis."

THE INTERNATIONAL MEDICAL CONGRESS.

THE necessary arrangements in preparation for the seventh session of the International Medical Congress, to be held in London in August, 1881, are progressing. The committee have discussed the question of the admission of women to the meetings of the Congress, and by a decided majority have determined to issue invitations to male practitioners only. This is the decision we were confident would be arrived at, for knowing the names of the committee we felt that on this, as on other points, they fairly represented the profession, and would not take any step distasteful to the majority of their fellows. The Congress is a voluntary association, and none can claim any "right" to be asked, and the fact that on some former occasions women have, unwisely, been permitted to be present, can in no way hamper the action of the British Committee. As regards the practitioners of this

country the decision is, happily, theoretical rather than practically important.

It is now definitely announced that Her Majesty and His Royal Highness the Prince of Wales have both been graciously pleased to extend their patronage to the Congress. Some few additions have been made to the list of officers printed by us a fortnight ago. Dr. Risdon Bennett and Dr. Bucknill have been added to the list of vice-presidents, Dr. Alfred Carpenter, Mr. Erichsen, Sir H. Thompson, and Mr. G. Pollock, have been placed on the Executive Committee, and Dr. Chepmell, Mr. Mitchell Henry, M.P., and Dr. Grigg, have consented to serve on the Reception Committee. Dr. Braxton Hicks is appointed a vice-president in the Obstetric section, and Professor Curnow is a secretary of the Anatomy section. The general secretary is already able to state that many well-known and illustrious foreigners intend to be present, among others Langenbeck, Virchow, Liebreich, and Waldenburg, and there is every prospect that this meeting will be a very notable gathering of professional celebrities. It must be the aim of all British practitioners to make this session worthy of the metropolis of the world, and of the great school of British medicine and surgery. But it can only be this, if all will heartily and generously co-operate and support the Executive Committee with thorough confidence. We repeat that the composition of that committee must be accepted as satisfactory; it is not a committee of a clique, but of the whole profession, and these gentlemen certainly deserve to be treated with entire confidence in the somewhat difficult task they have undertaken. We would strongly deprecate the raising of difficulties and objections which can only have for their object the discomfiture of the committee and the impairment of the success of the Congress. No doubt it is possible to criticise adversely the selection of the committee, and the presence of some names excites surprise equalled only by that caused by the absence of others. But could we hope for a perfect list? Is it not fair to recognise the difficulty of the choice where every selection entailed a rejection of at least one equally eligible man? From those whose names do not appear at all another complete list of officers could be selected well worthy of the posts to be filled. And where there are so many to choose from, the efforts of the committee should be supported by mutual confidence and forbearance. If personal or local jealousies are to be thrust forward and the visit of the Congress is to be made the occasion for the display of party feeling, the profession in this country will be disgraced in the eyes of the whole world, and it would be well not to hold the meeting at all. We appeal with confidence to the profession to support their representatives on the Executive, and to allow them fairly and deliberately to make all arrangements free from the outside pressure that petty jealousies and party spirit, however unworthy, can always exert. Thus alone can the success of this meeting, which all must desire, be attained.

THE PARKES MUSEUM OF HYGIENE.

THE first annual meeting in connexion with this museum was held on the 27th inst., in the Egyptian Hall of the Mansion House, under the presidency of the Lord Mayor. The meeting was largely and influentially attended, and the chief magistrate was supported by Earl Fortescue, Mr. George Palmer, M.P., Mr. Edwin Chadwick, C.B., Sir W. Jenner, K.C.B., the President of the Royal College of Surgeons, Sir Joseph Fayrer, K.C.S.I., Professor Erasmus Wilson, Mr. George Godwin, F.R.S., Mr. Rogers Field, C.E., Mr. Berkeley Hill, Mr. Chisholm Gooden, Dr. Wilson Fox, and many others.

The report, which was read by Dr. Poore, the honorary secretary, was of a decidedly encouraging character. Since the 1st of January (the museum being open on the mornings of three days in the week) considerably over 2000 casual visitors have been registered. The demonstrations given to artisans and others during the winter were largely attended, and a letter was read from Mr. Hodgson Pratt, the chairman of the Working Men's Club and Institute Union, expressive of the great service which had been rendered to members of the institute by the practical instructions which they had received in the museum. A letter was also read from Mr. Whichcord, the president of the Institute of British Architects, stating that, though prevented by unavoidable circumstances from being present, he and his colleagues in the institute were deeply sensible of the importance of the museum. The museum is much in need of money, and the report concluded with an appeal for funds.

The first resolution, expressive of approval of the objects of the museum, was proposed by Earl Fortescue, and seconded by Mr. George Palmer, M.P. In speaking to the resolution Mr. Erichsen dwelt upon the importance of hygiene as the helpmate of the surgeon, and assured the audience that the chances of recovery of a wounded man depended more upon his sanitary or insanitary circumstances than upon the skill of the surgeon. Mr. Erasmus Wilson showed with much happiness and force (and his remarks took obviously a great hold upon the ladies present) that the much-dreaded scourge of childhood, the disease which often stopped a child's education and blighted its prospects—viz., ringworm—depended entirely upon the hygienic surroundings of the child.

Sir William Jenner, in proposing a vote of thanks to the chairman, delivered an address of singular force and interest, and Mr. George Godwin and Sir Joseph Fayrer both eloquently insisted upon the importance of sanitary knowledge to high and low, rich and poor. The meeting will, we trust, have done much to disseminate a knowledge of the importance of the Parkes Museum as a means of instruction, and there ought to be no difficulty in raising a sufficient sum to carry out the wishes of the Executive Committee—viz., "The establishment of the museum in a position more independent and more accessible than that which it at present occupies."

SICK PAUPERS.

IT is now rather more than ten years since the late Dr. Anstie at our request undertook to visit the workhouses of the metropolis and report on their condition. It is therefore gratifying to us to find that the suggestions which arose out of that inquiry are gradually bearing practical fruit. The sick, the infirm, and the able-bodied paupers are, in the majority of the Metropolitan Unions, no longer huddled together in the same close confined building, situate in some filthy back-alum; but the sick are tended separately in what may be described as almost palatial infirmaries. In these, as the recent reports of our Commissioners on the Workhouse Infirmaries show, the patients are tended by trained nurses—a vast improvement on the state of affairs a few years ago. The only fault our Commissioners have as yet pointed out is that the supply of these nurses is not sufficiently liberal, and that more work is thrown on them than they can possibly perform in times of great sickness. It must not be forgotten, however, that though many of the Unions have entered on the path of reformation, many still are laggard in carrying out, or even entering upon, the much-needed reform. And here we may remark parenthetically, that it is a disgrace for a rich and wealthy parish like Marylebone to allow districts such as Stepney, Lambeth, Holborn, Westminster, and St. Giles, to pass them in the race. These parishes have for some time past provided their poor with ample accommodation in excellently-constructed sick asylums, whilst the overcrowded condition of the infirmary wards of the Maryle-

bone Workhouse during last winter and early spring can only be characterised as disgraceful. So overflowing were the wards that the guardians had to arrange with the Stepney authorities to take in patients that could not be stowed away on their own premises. It is to be hoped that the Marylebone authorities will be able to open their new buildings at Notting-hill before the commencement of next winter, so that a repetition of such overcrowding may not be experienced. Our sick paupers may congratulate themselves that the attention of the outside public is now fairly directed to them, and that the days of harsh management and neglect are rapidly passing away to be replaced by a more humane and enlightened treatment. The Association for Providing Trained Nursing in Workhouse Infirmaries, originated only a year ago by the Marchioness of Lothian, is already beginning to yield beneficial results. It is no slight thing to find that private charity is at length about to co-operate with the Poor-law machinery in relieving and sympathising with the unfortunate inmates of our parochial hospitals.

TRAIN-CATCHING.

PATERFAMILIAS, who having located his family at some "watering-place" within two or three hours of London, intends to take his holiday by "running up and down," should be warned that the practice of hurrying to catch a train is attended with many serious risks. The exertion may not be of long duration, and, except on very rare occasions, when it "seems to upset" him a little, the effort may be rapidly over and soon forgotten, but the strain on the heart and bloodvessels is violent while it lasts, and although unnoticed at the time it may work mischief. We have in our recollection cases of grave disease set up in this way, without the cognisance of the sufferer. There is, however, a class of cases, which does not appear to be generally recognised, and to which it may be well to direct attention. Not only may injury be done to the heart and great vessels by this exceptional straining, but the delicate structure of the nervous centres may be injured. It is a common experience with persons who are labouring under certain forms of incipient or subacute nervous disease, that violent exertion excites them mentally, in some instances producing almost homicidal impulses. There are several hypotheses on which this disturbance may be explained, but the point we are at the moment chiefly interested to bring out is the fact that not only may the rapid flow of blood stir the brain to impulsive action, it may even rouse dormant animal propensities to excitement. The impulse felt by a hurrying pedestrian to push or knock persons in his path is not wholly *impatience;* it is, in fact, a physically-induced irritability which, being often repeated, may become persistent. Train-catching does not improve the temper, and in some instances it may do remote and very serious mental mischief.

DEATHS IN PRISON.

THERE can be little doubt that the death of William Grant, prisoner in Walton Gaol, Lancashire, who expired suddenly from rupture of an aneurism whilst on the treadmill, will be made the subject of a searching investigation. It is to be hoped, however, that the inquiry will be conducted with fairness towards the medical officer, and that unless a case of gross carelessness can be proved against him he will not be sacrificed as a scapegoat to appease the public conscience.

Internal aneurisms are often extremely difficult to diagnose with certainty, and eminent physicians and surgeons, with all the necessary clinical appliances and opportunities of watching a case, are sometimes uncertain whether the symptoms are due to aneurism or some other cause. Again, internal aneurism may exist without giving rise to symptoms of gravity sufficient to cause suspicion of its existence, and it is not till after the death of the patient that its presence may be detected. If, therefore, the aneurism which caused the death of the prisoner Grant belonged to this category of obscure cases no blame can possibly be attached to the medical man for overlooking its existence on the admission of the deceased. The onus of the disaster lies, as we have so frequently pointed out, in the faulty arrangements of our prison system. A man apparently healthy is passed by the medical officer, after a single examination, as fit either to undergo a period of severe starvation on bread-and-water, or to perform severe mechanical labour. He is then taken charge of by the prison officials, and his punishment commences. If the man becomes ill, he is referred to the medical officer, but there seems no provision made for watching the effect of severe punishment on the various constitutions of prisoners till the effects manifest themselves pathologically. It is probable that had the medical officer been afforded an opportunity of watching Grant at his work on the treadmill the first day of his incarceration, he might have noticed something in the respiration or action of the heart that would have roused his suspicion, and have given him some clue to the existence of the disease which was not manifest when the man was in a quiescent state. As matters at present stand, it cannot be expected that the overworked and underpaid medical officers of our gaols should be ubiquitous, nor do we fancy that too much zeal in the direction we have indicated would be received with favour by the lay officials of prisons. We are of opinion, however, that short-termed prisoners on bread-and-water diet ought to be visited at least three times daily, and the temperature taken at least once daily, so as to detect the supervention of any acute form of disease, especially that form of pneumonia which seems to be the chief cause of death among short-termed prisoners. Moreover, the medical officer should carefully watch the effect of severe mechanical work when a man is first put on the treadmill. For this purpose the existing medical staff should be considerably increased. It is right that offenders should be punished, but there we must stop. A surgeon was always present to watch the effect of the torture on prisoners in days gone by, and who cried "Hold, enough!" when the limits of physical endurance were reached. Less wise, we leave the supervision of our experimental punishments to the unskilled turnkey. The prison system has already caused some sensational deaths; but nothing is heard of those prisoners who are discharged with their health hopelessly ruined by the severe and ill-supervised discipline they have been subjected to. A committee of inquiry is urgently called for to settle this question, and we hope the investigation, when undertaken, will be thorough and impartial.

ARTICULAR CARTILAGE.

WHILE the structure and general uses of articular cartilage are easily observed and well understood, it is curious to note that one fact about it has for long puzzled anatomists. Knox wrote many years ago that the cartilage "adheres by one of its surfaces to the bony tissue in a manner as yet little understood, but extremely firm;" and the latest English author—Mr. Morris—in his recent work on the joints, says, "it is connected with bone so firmly as to seem like a continuous structure," and thus stops just short of what would appear to be the fact. Articular cartilage and the subjacent bone not only "seem like," but *are* "one continuous structure." Originally the whole skeleton, with but few exceptions, is cartilaginous, and the articular surfaces of bone are in most instances formed from centres of ossification deposited in masses of cartilage, which enlarge centrifugally until the whole of the cartilage, except one thin

surface, is ossified, and this remnant remains permanently as the articular cartilage. It is not, then, a union between two diverse structures, but merely that a part of a single structure has undergone a special change. The bone and cartilage are one continuous tissue, and no uniting medium can be found or expected. Similar conditions are met with in other organs and tissues; thus there is no special "union" between the general skin and the nails; nor in partial fatty degeneration of the liver do we find the fatty cells "united" in any particular fashion to the healthy ones. It is right to add that Knox objected to this view, that after removal of the lime salts from a recent bone by means of acids no intimate connexion between the tissues can be seen, and the cartilage then separates spontaneously. The explanation of this separation lies in the fact that the thin articular lamella between the cancelli and cartilage differs in many respects from ordinary bone, and especially in containing a larger proportion of earthy salts, so that when these are separated by an acid the slender animal residuum is insufficient to maintain the union of the cartilage and softened cancellous bone.

It is also worthy of note that the arrangement of the soft and firm parts of the cartilage resembles that existing in the articular ends of bones. The cells of cartilage are the soft compressible part like the medulla of bone, and the hyaline matrix is the firm resistant part analogous to the bony spicules and lamellæ. It is the custom to emphasise the arrangement of the cells in the cartilage; it is more useful and physiological to speak of the arrangement of the matrix, just as we describe the lamellæ of bone rather than the configuration of the cancelli. The matrix forms a thin pellicle on the surface of the cartilage, parallel with it, like the articular lamella of bone; this gives smoothness to the surface and welds together the deeper part, which is composed of columns arranged at right angles to the joint surface, parallel with the radiating lamellæ of the bone; between these vertical columns are the groups of soft cells. Thus the columns of matrix are arranged in the line of pressure in precisely the same way as are the lamellæ of bone. We have in this another example of the fact that articular cartilage is, if we may be excused the expression, unossified bone; and it is an error to speak of it as separate from the bone, or as something superadded to bones at their joint surfaces. By being unossified it allows the movements of bones to be noiseless, frictionless, and even, and it forms an efficient elastic spring or buffer to deaden shocks transmitted up the rigid bones.

MANCHESTER ROYAL INFIRMARY.

THE report of the Board of Management of the Manchester Royal Infirmary, presented at the annual meeting of the trustees and subscribers of the institution on the 29th inst., gives, on the whole, a satisfactory account of the work done or commenced during the past year. Sanitary defects in the building have been or are in course of being removed, and the nursing staff are to be provided with permanent accommodation in the grounds. The increase in the number of patients treated has not, it would appear from the balance-sheet, been attended with an augmented expenditure, the disbursements having been less, indeed, than in the previous year, and this economy has not, the Board state, been effected at the expense of efficiency. Whilst the Convalescent Hospital at Cheadle has been worked to its full capacity, the hospital at Monsall has, considering the extent of its accommodation, and owing to the general absence of infectious disease, been comparatively empty, the number of beds occupied during the year having averaged only twenty-one. The yearly expenditure at the three institutions is estimated at about £27,000; the income last year was £20,803, and the legacies amounted to £715.

COLOUR-BLINDNESS AND RAILWAY EMPLOYES.

THE State of Connecticut has set an example in the matter of colour-blindness among railway employés which is worthy of imitation. An Act has there recently been passed which imposes the duty upon every railway company to have each person in their employ as "locomotive engineer or fireman, train conductor or brakeman, station agent, switchman, flagman, gate-tender, or signalman," examined, on or before the first day of October next, by one of the examiners to be appointed by the Governor of the State, as to colour-blindness and visual power. It is further enacted that every railway employing a person in any of the specified capacities who does not possess a certificate of freedom from colour-blindness, and possession of visual power, duly issued in accordance with the provisions of the Act, shall be punished by a fine of not less than 200, and not more than 1000, dollars. The duty and responsibility of carrying out the provisions of this Act have been delegated to the State Board of Health. Rules and regulations in accordance with the Act have been drawn up, and have doubtless been placed in the hands of every company owning or working a railway within the State. It is provided that this Board shall annually, in the month of May, recommend to the Governor, for appointment as examiners, two or more medical experts; such examiners to issue certificates in accordance with the Rules of the Board of Health, and to report to the Board. The State of Connecticut is the first of the American States to pass a law requiring the examination of all persons employed in moving railway trains, and it is reported that the standards adopted for the examinations are, for the most part, those agreed upon at the International Medical Congress at Amsterdam, in September, 1879. The extensive prevalence of colour-blindness, which has recently attracted considerable attention, and the almost universal use of colour-signals on railways, make the adoption of some such legislative action on our home railways almost a necessity.

HYDROPHOBIA.

FROM Lancashire, Cheshire, and Wales accounts reach us of renewed attacks of hydrophobia. A man, aged twenty-one, has died of the disease in the Manchester Infirmary, who had been bitten by a dog fourteen months ago. The animal was "running" some sheep, and the man pursued it to a hole, in which it took refuge. In trying to pull it out the dog bit him on the hand. At Prestwich several cases of rabies have occurred. One of the dogs has bitten three children, and, it is said, has not been destroyed. We learn from the *Bristol Mercury* that the village of Bodlinog, in the Rhymney Valley, was lately thrown into a state of great excitement by the appearance of a rabid hound which tore through the streets, biting everything that came in its way in the most savage manner. On being chased from the village, the animal flew across the mountain to Deri, and flew at some children, and savagely attacked a dog and a cat. Farther on it bit a boy in the ear, and a man in the calf, and then so injured a little boy that his life is in a precarious condition. At least twenty dogs known to have been bitten were destroyed. Several persons have been warned to watch other animals which it is feared have been bitten, and steps have been taken at other villages, through which the dog passed, to guard against other tainted or suspected animals being at large. Had a similar precaution been taken in the case of the affected hound this disastrous outbreak would not have occurred. The dog belonged to a farmer in the neighbourhood, and is known to have been bitten three months ago. Surely the owner of a dog, under such circumstances, should be held responsible for the results of not destroying it, and, still worse, of allowing it to be at large.

ROPOSED TESTIMONIAL TO PROFESSOR SPENCE.

ABOUT six weeks ago some professional friends of Professor Spence proposed that, in consideration of the distinguished services he had rendered to surgical science, the profession should present him with his portrait, and also that a replica should be placed in the hall of the Royal College of Surgeons, Edinburgh. This proposal has been so cordially supported that with a few additional subscriptions the Committee hope to be able to present each subscriber with an etching of the portrait by Durand of Paris. The list will remain open for another month, in order to give to those who may not have heard of the movement an opportunity of contributing. The subscriptions are limited to one guinea, and are payable to Dr. P. H. Maclaren, the Honorary Secretary and Treasurer.

DR. TANNER.

DR. TANNER continues his voluntary fast at New York. Opinions are much divided as to the absolute integrity of the fast, but, if the reports are true, there can be no question that the nearest limit to actual starvation is attained. When the case is complete we shall see whether any physiological lessons have been learned; at present we have no reason to congratulate ourselves on any important gain to science through this fool-hardy experiment.

THE members of our profession, whose names are published in connexion with the sad affair at Candahar, are as follows:—Dr. Harvey, who brought news of the battery; Surgeon-Major C. J. F. M'Dowall, 3rd Bombay Cavalry; Surgeon G. E. E. Burroughs, 3rd Scinde Horse; Surgeon-Major C. J. Sylvester, and Surgeon A. K. Stewart, 1st Bombay N. I.; Surgeon E. Tootell, 30th Bombay N. I.; Brigade-Surgeon J. O'Nial, Principal Medical Officer with General Primrose's force.

WE are requested to announce that the full-sized clay model of the statue of Harvey, which is to be erected at Folkestone, has nearly approached completion, and that the sculptor, Mr. A. B. Joy, invites the subscribers to the Harvey Tercentenary Memorial Fund to a private view of the model (upon presentation of address cards) on Wednesday next, the 4th of August, from 11 to 5.30 P.M., at his studio, No. 8, The Avenue, 76, Fulham-road, S.W.

THE election to the surgeoncy of the Cumberland Infirmary, recently held by Dr. Macdougall, appears to be exciting considerable interest in the northern county. The names of two gentlemen are mentioned as candidates for this appointment—Dr. H. A. Lediard, F.R.C.S. Eng., and Mr. W. Brown, M.R.C.S. Eng., L.R.C.P. Edin.

THE General Committee of the Chelmsford Dispensary and Infirmary are contemplating the purchase of a site on which to erect a more commodious building for the accommodation of the patients of the institutions, and are making arrangements for the collection of funds for the purpose.

ACCORDING to the *Times of India* of last mail, the European troops stationed at Mhow, in the Bombay Presidency, are suffering from malarial and sun fevers of a very severe type. The heat of the weather had been for some months unusually severe.

WE are asked to announce that the annual meeting of the Irish Medical Graduates' Association will be held in the Section room at Cambridge on Wednesday, August 11th, at 5.30 P.M. The annual dinner will take place at the Lion Hotel, at 6.30.

IT is feared that Dr. Haller, a physician of Burgdorf, who, with guides, left Grindelwald on July 14th for the Bergh Hut, and has not since been heard of, has perished in his attempted ascent of the Matterhorn.

MR. ARTHUR STANLEY BUTLER, of Exeter College, Oxford, has been chosen to fill the chair of Natural Philosophy in St. Andrews University, recently vacated by Dr. William Swan.

DR. MATTHEWS DUNCAN has accepted the invitation of the Council of the Midland Medical Society to deliver the inaugural address for the ensuing session.

A SUM of £80,000 has been ensured for the purpose of promoting the movement for establishing a University College in Liverpool.

THE approaching meeting of the Social Science Congress in Edinburgh will be presided over by Lord Reay.

The Lancet Commission
ON
WORKHOUSE INFIRMARIES.

LIVERPOOL.

BEFORE entering into a detailed description of sick asylums as distinct from the workhouse proper, we think for the sake of contrast it will be advisable to present our readers with a picture of a large workhouse in which the sick, the infirm, and able-bodied are still treated in the same establishment. And for this purpose the Liverpool Workhouse affords a striking illustration. For whilst it exhibits markedly the disadvantages of the combined system, it shows how careful management can lessen the difficulties and evils inseparable from such an arrangement.

The Liverpool Workhouse stands on an elevated piece of ground centrally situated in one of the best quarters of Liverpool, closely adjacent to the School of Medicine and the Royal Infirmary, and consists of three main blocks of buildings. A central block which contains the principal offices of the establishment, the receiving rooms for new inmates and urgent cases, clerks' offices, dining-hall for the able-bodied inmates, kitchen, bakery, stores, dispensary, &c. Persons wishing to become acquainted with the details of management connected with such large establishments could not do better than pay a visit to this department. The house governor, Mr. Anderson, evidently prides himself on his arrangements, and certainly he deserves considerable praise for the scrupulous order and cleanliness that are everywhere manifest in this part of the building. The stores, too, seem to have been selected with considerable judgment, and the meat, flour, coffee, cocoa, &c., which we examined, were of excellent quality. The dining-hall was filled with inmates at the time of our visit, who were just finishing dinner, which that day consisted of "scouse," a dish the composition of which will be best described to the uninitiated as a kind of Irish stew rubbed down to a mash. It tasted to us appetising, and its constituents were certainly eminently nutritious, and it seemed, to judge from the polished empty basins, to find favour with the diners, many of whom looked, like Oliver Twist, ready to ask "for more." The vast assemblage of worn, expressionless, aged faces in this hall, struck us most painfully. A representation of some of them would form a fitting companion to Herkomer's picture, "The Last Muster," only in this case the veterans depicted would be those who had always fought in a battle that had always been against them.

The central block may be said to be flanked by two lateral blocks, one consisting of the buildings set aside for the male inmates and a separate building for fever cases; the other

for female inmates; and for the purpose of description, the chapel may be considered to belong to this block. These lateral blocks being (with the exception of the detached building devoted to fever cases, and the chapel) old ones, they therefore lack much of the convenience and suitability for hospital purposes which obtain in the admirably planned modern infirmaries which have been, and are being, established in the metropolis. The total number of inmates the workhouse is capable of containing is 3500. On the day of our visit they numbered 2840—of whom 1412, or about one-half, were in hospital. The average daily number in the sick wards is 936, about one-third being acute cases; whilst the daily average in the infirm wards is 430—"all of them chronic and mostly helpless cases, requiring constant nursing with but little medical treatment." The number of admissions into the hospital wards during the year is about 10,000; and last year there were 1178 deaths. The medical staff consists of three non-resident officers—viz., Drs. Geo, Alexander, and Robertson, who make daily visits; and a resident staff of three medical officers—a number generally increased to four in the winter, when the stress of work is greatest. The nursing department is under the control of a lady-superintendent, and is conducted on the Nightingale system. The nursing staff comprises 59 day and 16 night-nurses all told, inclusive of 10 nurses attached to the fever block, and 27 probationer nurses. The resources of the institution are wisely devoted to the training of nurses, many of whom leave the infirmary highly qualified to take up work in hospitals and elsewhere.

The wards vary much in size and disposition. The male wards occupy one side of the quadrangle, the female another side. Some of the wards are much better adapted for their purpose than others; are commodious and well lighted; others are shut off on one side by a corridor, with wards opening on each landing. The wards on the female side are less commodious than those on the male side of the house. The number of beds in each ward varies from twenty-six to fourteen, but some few of the wards are double. We were struck by the manner in which every available space was occupied by the wards; on some floors they opened directly one into another, and in this respect the building is at a great disadvantage. As to the disposition of the wards and their assignment to particular classes of cases, we can only speak in very general terms; for although we had the advantage of being shown over the whole of the buildings by the medical staff and Mr. Anderson, the governor, the number and variety of the wards make it impossible for us here to do more than speak in very general terms upon their disposition. In the basement are the lunatic wards, suitably provided with padded rooms. The insane have only a temporary lodgment in the workhouse pending their removal to the county asylum. The wards are disposed on three floors. Of these the first is devoted mainly to medical cases, the second to surgical, and the third to infirm and dirty cases. Of these latter there were no fewer than 179 on the male side, and 249 on the female, on the day of our visit. A decided improvement in these infirm wards is the substitution of iron bedsteads, one side of which can be let down, and furnished with mattresses made in two segments, in place of the old wooden, trough-shaped bed, sloping to a central aperture. Many of these old beds are still in use; but the governor hopes in time to get them all changed for the improved bedstead. The cases of ulcer are collected into one ward, and many different methods are from time to time tried in this treatment. Lately Dr. Alexander has been using hydrochloric acid dressings with good results. The eye-wards contained several cases of ophthalmia, but by no means an excessive amount. There is a special ward for erysipelas cases; but we are informed that no cases of erysipelas have arisen in the hospital in the last three years; nor has there been any pyæmia to speak of, an immunity which is attributed to the free use of disinfectants. Then there are special Lock wards, and cleansing wards for the reception of cases of scabies. These latter are generally very full of inmates, and it is found to be a matter of difficulty to get the bedding thoroughly looked after. The lying-in wards are fairly well arranged, and during last year received about three hundred inmates. Patients coming for admission are, if urgent cases, seen at once; but other cases are kept at the receiving ward until 5 P.M. There are large baths, and also provision made for disinfecting and destroying clothes. The majority of cases admitted are, as may be expected, chronic in nature—bronchitis, phthisis, heart disease, rheumatism, and paralysis. We cannot give any statistics on this point, no published medical report being issued, so far as we are aware. Still there is, of course, a fair sprinkling of acute diseases—pneumonia, acute rheumatism, &c.—whilst all fever cases are admitted into the separate building set aside for their reception. It may be convenient if we now at this time record our impression of the nature and variety of disease included in these walls. We fully admit that it is rich in most valuable clinical material, which has frequently been set to good advantage by the medical officers. We were shown several cases of paralysis agitans—of different degrees—one of the most striking being that of an old-looking, semi-imbecile man, forty years of age, who has been in the infirmary for twenty-two years, and who is now quite unable to move about. Two well-marked cases of progressive muscular atrophy—one in a man of sixty-two—were pointed out as being good examples of this affection, and in the infirm wards of both sexes there is congregated a large number of hemiplegics, paraplegics, and ataxics. An excellent example of molluscum fibrosum, another of ichthyosis hystrix, and one of elephantiasis Græcorum, were also to be found in the male wards. The leprosy case was especially interesting. The patient was forty-two years of age, and had suffered from the disease for about two years. He presented the well-marked leonine type of features, and we were informed that very great improvement had taken place in him under the use of chaulmoolgra oil. Amongst the surgical cases was one of amputation of the hip for disease in a boy. The case was doing very well. Another case was one in which Dr. Alexander had performed two operations for epithelioma of the lip. These are only a very few out of the many cases of interest contained in the infirmary; there enumeration will suffice to show that there is no lack of material for clinical observation or surgical operation. The means at the disposal of the staff for keeping records of the cases did not appear to us to be very complete. There do not seem to be any case-papers distinct from those employed for entering the prescriptions. The temperatures are taken by the nurses, who are provided with thermometers for the purpose; in acute cases such records are made twice a day, but no special charts are provided. The testing of the urine also falls to the nurses; in every case this is done on admission, but apparently not subsequently unless the urine is then shown to be abnormal. In the nurse's room attached to the wards are stored such medical appliances as cupping instruments, croup-kettles, ophthalmoscopes, and urine-testing apparatus; whilst in the same room are stocked a considerable number of drugs supplied from the dispensary. The medicines of each patient are all stored in one cupboard in the ward, and not placed by the bedside. The poisons are kept apart—a wise and necessary precaution. The fever hospital, which is wholly detached from the rest of the buildings, contains 160 beds, and it is interesting to recall that it stands on the site of the old fever buildings where Currie practised his treatment of fever by cold bathing—a treatment which, after falling into unmerited oblivion in this country, has at length been widely revived. Many of the cases admitted into these fever wards came from the ships of the port, and on the day of our visit we saw a Swedish woman with her child suffering from varicella in one of the wards on the ground-floor, these two wards being devoted usually to pyrexial cases of an indefinite character. In one of the upper wards were some members of a family suffering from typhus. But of late years fever has diminished very much in Liverpool, and beyond the cases mentioned the fever block was empty. The resident officers take it in turn to look after this department, which has a nursing staff distinct from the rest of the building. There are two institutions affiliated to the workhouse which should not be passed over. One is a convalescent hospital at Maghill for about forty cases, mostly children; the other an imbecile asylum at Dingle Mount for about ninety harmless imbeciles, idiots, and epileptics. Each of these institutions is visited daily by a specially-appointed medical officer, one of the local practitioners of the district. They are in charge of female officers, but are in every way, as regards administration, worked from the workhouse. The mortuary arrangements struck us as being unsatisfactory. The dead-house and post-mortem room are decidedly cramped, and situated too near the general buildings either for health or decency. This and the crowded condition of the sick wards struck us as the most objectionable features noticed in our round of inspection.

The general impression our visit made upon us was that

this infirmary is decidedly well managed, and, in spite of disadvantages arising from its primary faults of construction, is well worthy of the high position it takes amongst these institutions in the provinces. It abounds in much valuable clinical material, and is fortunate in possessing a staff who largely avail themselves of the opportunities afforded them, and who work zealously in the spirit of the age. At the same time we believe that these gentlemen would be the first to welcome any suggestions whereby the study and observation of these cases could be made available to others. If it were possible to institute minor officials to record the cases, all this valuable material would be put to good purpose. It would be even worth the while of advanced students to spend some months within the wards of such an institution as this, containing as they do so varied a group of examples of disease,—especially rich in the diseases of old age. But if there be one direction more than another in which the Liverpool Workhouse Infirmary should be commended, it is in its nursing system. We are far from saying that even yet is its nursing staff sufficient to cope with the vast amount of labour entailed on it, especially in the crowded infirm wards. Still it is always possible to increase a staff, the great thing is to have a sound and good working system. The revolution effected in workhouse nursing, since Agnes Jones was appointed the first superintendent to establish a system of trained nursing, was one which began in Liverpool, to spread thence over the land. The experiment proved to be a success, a result in a large measure no doubt owing to the indefatigable labours of that excellent lady, whose "Memorials" contrast in their simplicity with one other biography of a similar kind, recently published and far more widely read. Those who knew Miss Jones have testified in no measured language to her worth, and her premature death from typhus, contracted in the discharge of her duties, was deeply deplored. In the few years of responsible position at the Liverpool Infirmary she succeeded in establishing a system of nursing which has never been called in question, and which it would be well for some present-day reformers to imitate instead of creating impracticable systems of their own.

The separation of the sick from the ordinary infirm and able-bodied pauper would greatly facilitate and ensure the proper treatment of the sick. And it seems to us a question well worth the serious consideration of the guardians whether the construction of the buildings on another site in some other quarter might not be possible to obtain this advantage. The present site must be of considerable value, and the sale of it might enable the guardians to erect a more commodious building on cheaper land in the suburbs. The majority of cases could then be housed and treated in better buildings and purer air than is at present the case; whilst it would be only necessary to retain a comparatively small building in the city for the reception of casual inmates and acute cases of illness arising among the outside population. The ratepayers of Liverpool, are not only shrewd men of business, but have shown considerable liberality in many matters concerning the welfare of the poor of their town, so that the consideration of slight temporary increase in the rates caused by the removal would probably not deter them if they felt convinced it was the right thing to do. Of that we have no doubt, and believe the question of removal of some of the inmates to more spacious quarters to be one only of time. The Liverpool guardians have earned the credit of being the first to introduce the system of trained nursing in our workhouse infirmaries, one of their number, Mr. Rathbone, guaranteeing a large sum, £5000 we believe, to cover expenses in case the experiment failed. With such an instance of Liverpool munificence and liberality before us, we shall be surprised if the guardians of that city will long remain content with their present crowded and unsuitable building, but will ere long vie with London and their neighbour, Manchester, in erecting a new workhouse and sick asylum adequate to the increasing requirements of the city, and worthy of themselves.

A GOLD CUP and an appreciative address were in the early part of last month presented, at the hall of the Medical Society of Victoria, to Dr. J. E. Neild, who for many years has occupied the posts of editor of the *Australian Medical Journal* and secretary to the Society. The meeting at which the presentation took place was attended by a large number of the leading medical men of Victoria, and appears to have been of a very gratifying character to all present.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL INSPECTORS OF THE LOCAL GOVERNMENT BOARD.

Southend.—Our readers will probably remember that at the close of the past year and the beginning of the present rumours of a serious prevalence of enteric fever in the pleasant seaside resort of Southend, situated on the northern shore of the estuary of the Thames, became current. The rumours appeared to derive confirmation when it became known that Dr. Thorne Thorne, of the medical department of the Local Government Board, had been despatched to the spot with instructions to make inquiry as to the rumoured fever, and generally to examine the anitary condition of Southend. Dr. Thorne Thorne's report of this investigation is now before us, and we may say at once that while the rumours of fever proved to be well-founded, the locality in which the disease appeared was not the town of Southend—the health-resort of that name—but a detached hamlet, named Prittlewell, within the urban sanitary district of Southend. The town, in fact, escaped the outbreak of fever, and does not appear to have suffered from the contiguity of the infected locality. "Indeed," writes Dr. Thorne, "the two places (Prittlewell and Southend) are, from a sanitary point of view, quite distinct; they are situated about a mile apart; they have different water supplies and distinct methods of drainage; and there appear to be no direct means by which such a disease as enteric fever could spread from one to the other." The sanitary condition of the town of Southend seems to be fairly attended to by the local authority. There is an excellent public water-supply, but this is not yet generally distributed; and a system of sewerage, which needs some details before it will be completed. But if the local authority think fit to be guided by Dr. Thorne's recommendations, it may readily place the sanitary reputation of Southend beyond reproach.

Prittlewell, the scene of the outbreak of fever, is an ancient detached village within the Southend urban sanitary district, and at the time of Dr. Thorne's inquiry seems to have been wholly neglected by the sanitary authority. Here during the six months, September, 1879, and February, 1880, among a population estimated at 600, no less than 100 cases of enteric fever occurred. Wells, cesspools, and privy-pits are hollowed promiscuously in the same porous stratum of subsoil. The wells are at all times liable to pollution by percolation of the contents of the cesspools and privy-pits through the intervening soil; but this liability is much greater at some times than others. Thus, for instance, when the level of the subsoil water becomes exceptionally raised after heavy rainfall, and encroaches upon the cesspools and privy-pits, the water in the wells and the filth in the cesspools and privy-pits are put in direct communication. This condition of things, it appears, happened in Prittlewell in the autumn of 1878; it was not general over the whole of the village, but from a topographical peculiarity was confined to a particular portion of it. It was to this portion that the outbreak of enteric fever was almost wholly confined; and there can be little doubt that the disease was then determined by an exceptionally polluted state of the water-supply of the particular locality. The prosperity of Southend town must run risk of being seriously damaged by a continuance of the state of things, both as to water-supply and drainage, which Dr. Thorne describes he found in Prittlewell; and as the village, by extension of buildings in that direction, appears to be about to become a part of the town, it behoves the local authority to amend as quickly as possible the sanitary condition of the village, and remove a reproach from their district.

Edmonton.—A report has been issued by the Local Government Board, containing the results of an inquiry made by Dr. H. F. Parsons, one of their medical inspectors, on the results of an inquiry into the endemic prevalence of enteric fever and the general sanitary condition of the urban sanitary district of Edmonton, in the northern suburbs of London. The report presents a remarkable picture of the

sanitary and structural conditions of buildings which too commonly obtain in the rapidly-extending suburbs of London, where apathetic and short-sighted local authorities and imperfect bye-laws contribute to reproduce year after year the evils which it has been the aim of the sanitary Acts to obviate. "The cottages recently erected in Edmonton proper," writes Dr. Parsons, "are many of them of the flimsiest style of jerry-building. The mortar which was being used at the time of the inquiry in some cottages in course of erection mainly consisted of road scrapings—black fetid sludge. The sanitary authority had, however, legal proceedings pending against a builder for using improper materials for mortar. There was no damp-course in many instances. In one case there were no ridge-tiles to the roof to exclude rain, the slates at the angle of the roof being merely nailed by their edge to the ridge piece." This being an example of the state of matters above-ground with regard to the most numerous class of buildings, the sort of care given to those matters which are hidden from sight below ground may readily be conceived. Edmonton has a system of sewers, but these appear to have been constructed after the manner of the cottages described, and it seems questionable whether they are more mischievous or useful. Of house drainage (the public sewers being as hinted), it may be said that its main aim seems to be not to facilitate the passage of drainage into the sewers, but to facilitate its leakage into the subsoil. Cesspools and privies are still common, the system of sewerage notwithstanding. Add that almost all the water supply is derived from shallow wells, and the mind is at no loss to conceive the conditions which make enteric fever endemic in the place. Indeed, the insanitary arrangements of Edmonton appear to be especially designed for facilitating the pollution of the soil, the water, and the air with the excremental matter. Dr. Parsons mentions a curious indication of fouling of the soil which we have not found noted before. In certain cottages, especially on Sundays, an offensive effluvium pervades the house, coming from the coal-cellars. In these cases the floor of the cellar proved to be the natural soil, unfloored with wood or other material. On Sundays pumping at the outlet of the sewers, for the purpose of distributing the sewage on to land for irrigation ceases, and the sewage backs up in the sewers, and consequently, having regard to their leakiness, in the subsoil. This effluvium is chiefly observed coincidently with this backing-up of the sewage, and Dr. Parsons is no doubt right in looking upon it as an indication of the weekly surcharging of the subsoil with offensive matters.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Leicester.—Dr. W. Johnston's report on the health and sanitary condition of the borough of Leicester for the year 1879 is, like previous reports of this gentleman, a document of the highest interest. Although dealing with strictly local subjects, it treats them in a fashion which gives them general value, and makes the report one of permanent importance. It is not an insignificant consideration that the report is published with a careful consideration to typography and diagrammatic illustration, which add to its interest and befit its worth. The subjects which will chiefly arrest attention in this report relate to the working of the local Act requiring the giving immediate information to the sanitary authority of the occurrence of certain diseases, the observations on diarrhœa, the immunity of Leicester from "fever," and the infant mortality of the place. The local Act referred to came into operation on Sept. 13th, 1879. Nevertheless, short as the period was within which the Act had been in force, Dr. Johnston reports very favourably of the advantages in the limitation of infectious disease which had been derived from it. A larger number of cases had been removed to hospital; it had been possible to maintain a greater control over children from infected houses or convalescent from infectious disease frequenting school, as well as over the making up of goods for commercial purposes in infected houses, and more detailed care in helping families as to processes of disinfection had become practicable. The Act, notwithstanding predictions to the contrary, has worked without friction, and Dr. Johnston is obviously hopeful that the antagonism to the Act displayed in the first instance by the medical profession in the borough will subside. The marked success of operation of the Leicester Act no doubt rests largely on the fact that the borough possessed at the time the Act came into force an excellent infectious-disease hospital. The possession of such a hospital ought to be made a condition precedent to the granting of powers to any sanitary authority for the compulsory communication of information as to infectious disease. The death-rate from diarrhœa in Leicester in 1879 was the lowest that had been recorded in that town. Dr. Johnston comments on this concurrence of a low death-rate with the low average of mean temperature of the air, the absence of sunshine, and the great rainfall, and shows how the facts tend to confirm the conclusions he has formed on the influence of ferments derived from the putrefaction of animal refuse collected in cesspools and sewers in provoking diarrhœa. He again points out from last year's records that the diarrhœa was not limited to any particular age, although chiefly fatal in infants and young children—a distribution inconsistent with the view that diarrhœa was the result of maternal neglect and bad nursing. The immunity from fever in Leicester is assigned to the general plan of avoiding direct connexion between the house-drains and the sewer, the rarity of cesspools, the absence of "slums," and the good supply of pure water. Dr. Johnston discusses at some length the causes of the excessive infant mortality of Leicester, and shows that this mortality is especially a phenomenon of the third quarter of the year, and particularly relates to diarrhœa, tubercular diseases, atrophic affections, and premature birth. A theory of maternal neglect is wholly insufficient to account for the phenomenon, and to whatever extent such neglect may concur in helping to the result, other and more efficient causes must be sought for an explanation. These causes, in so far as diarrhœa is concerned, must, according to Dr. Johnston, be looked for in peculiar local conditions.

Bolton.—Mr. Edward Sergeant has had the good fortune of having to prepare for his sanitary authority a quite uneventful report of the health and sanitary condition of his district for the year 1879. The borough in that year had a birth-rate of 37·0 per 1000 proper and a death-rate of 21·2 per 1000. The infant mortality was unusually low, and zymotic diseases "were accredited with fewer deaths than in any year yet recorded." Nevertheless, Mr. Sergeant has sought to attach a special interest to his present report by giving (after the manner of Mr. T. P. Teale) plates illustrative of the dangers arising from sundry defective drainage arrangements. The report has some observations on the second year's operation of the Local Act for the notification of infectious diseases to the Sanitary Authority. The Act, in the first instance, worked with so much friction that it was found necessary last year to obtain a Provisional Order for amending it in several details. We fail to gather from the present report a clear idea of the working of the Act as amended by the Provisional Order, but it seems doubtful whether friction has still been satisfactorily removed. The amount of infectious sickness reported to the Sanitary Authority last year (651 cases) was less than in the previous year, but, happily, this is to be attributed to the exceptional freedom of the town from infectious diseases.

REPORT OF THE MEDICAL SUPERINTENDENT OF THE DEPTFORD HOSPITAL.

The report of the Medical Superintendent of the Deptford Hospital (Dr. John McCombie) for 1879 shows that, in the course of the year, 1634 acute cases of small-pox were admitted, 1325 discharged recovered, and 282 died. Of these cases 1148 were vaccinated, of 228 the vaccination was doubtful, and 258 unvaccinated. Of the vaccinated 83 died, of the doubtfully vaccinated 78, and of the unvaccinated 121, showing a death-rate of 7·2 per cent. in the vaccinated, 34·6 per cent. in the doubtfully vaccinated, and 47·2 per cent. for the unvaccinated. The statistics Dr. McCombie gives suggest to him that sex appears to have an important influence on the mortality from small-pox in vaccinated persons after puberty. They show that in cases with imperfect marks two deaths occur in females as early as seven years, while in males no death occurs before twelve; and in cases with good marks deaths occur in females at eleven years of age, and there are five deaths under puberty (sixteen years); but in males no death occurs under nineteen years. He thinks that these data indicate the necessity for earlier revaccination in the case of females than in the case of males.

Dr. McCombie records not less than ten cases of small-pox after *revaccination;* but on these cases he observes—"It would appear from this that cases of small-pox do occasionally occur after apparently successful revaccination; but I

would remark that in nearly all the cases the primary vaccination was imperfect, and I would suggest that the revaccination was in some way imperfect, since no case of small-pox has occurred here among the staff, who were successfully revaccinated before entering on their duties. Up to Dec. 31st, 1879, 148 staff have been employed in the hospital. Of these, 141 have been in more or less direct contact with patients suffering from small-pox. All were revaccinated before entering on their duties; only one took small-pox. This was the case of a ward servant, who developed small-pox after entering the service, and eight days after revaccination had been performed. She had evidently received the infection of small-pox before she was revaccinated."

THE HEREFORD SANITARY COMBINATION.

We learn from the *Hereford Times* that the authorities of the Hereford Combined Sanitary District have decided to maintain their combination, at least for a further period of three years, and to retain Dr. Vavasour Sandford in the appointment of Medical Officer of Health, an appointment which he has now held for six years. The right-mindedness of this action is, however, stultified by a resolution of the authorities to reduce the salary of the medical officer of health from £550 to £400! It is admitted by the authorities, without exception, that Dr. Vavasour Sandford has done the duties of his difficult office well, and with infinite advantage to the sanitary condition of the combined districts; moreover, that at least £100 of the proposed salary must be devoted to travelling expenses. Fortunately, the resolution of the authorities cannot be carried into effect without the consent of the Local Government Board, and we can scarcely conceive of that Board lending itself to a procedure which is calculated to degrade the functions of a medical officer of health, and to deter men of good standing and with the requisite qualifications from holding the post. It is high time that some measures were taken to put an end to these vagaries of local sanitary authorities. They betray on the part of the perpetrators an indifference to public-health requirements of communities under their care, and a disposition to behave unjustly to medical officers of health, in the highest degree disheartening, and it behoves the Local Government Board to see that the designs of the Legislature shall not be frustrated in this pitiful fashion.

THE WATER-SUPPLY OF CROMER.

A seaside town, with waterclosets and a system of drainage into the sea, and no regular water-supply, must be regarded as in a very unsafe sanitary condition. These are the conditions which obtain in the charming little Norfolk resort—Cromer. A project for establishing an adequate water-supply has been for some time in progress, but it has lately hung fire, and there is some fear that it may be relinquished. At present the chief source of water for ordinary purpose is the rain. There are a few wells in the town, water from which can be purchased, but for the waterclosets supply, cleanliness, and even in many cases for drinking purposes, rain-water is used, collected in large tanks. No doubt, in a wet season, such as the present, the supply is adequate, but in a dry season the supply may fail, and the state of affairs would then be perilous in the extreme. Perfect waterclosets, an abundant water-supply, and free ventilation of the sewers are absolutely essential for the safety of a system of drainage into the sea, and if anyone of these conditions is imperfect the sanitary system becomes insanitary, and the provision for health, a source of disease. It behoves those who are interested in the town to persevere in their efforts to establish a good water-supply, or public confidence in the salubrity of the place will scarcely be maintained.

REGISTRATION OF INFECTIOUS DISEASES.

At a meeting of the Executive Committee of the Dublin Sanitary Association, held recently, a resolution was adopted in reference to this subject. The committee approved generally of the principle involved in the proposal to establish a system of early and compulsory notification of infectious diseases to the Sanitary Authority, and of subsequent official registration of the same, as they believe that the information so obtained as to the origin and spread of epidemic diseases cannot fail to be of great value in aid of the efforts to improve public health.

THE RIVERS POLLUTION PREVENTION ACT.

A deputation from the Fisheries Preservation and other Associations had an interview with the President of the Local Government Board on Tuesday, the 27th, for the purpose of representing to him the necessity which, from their point of view, existed for giving greater facilities for putting the Rivers Pollution Prevention Act, 1876, in operation, and for making its provisions more stringent. Mr. Dodson, in reply, stated in effect that the observations of the deputation furnished another illustration of the difficulties surrounding the subject of purifying our rivers. Government was called upon to reconcile in the best way they could the commercial, fishery, and sanitary interests involved in the question, each clashing with the others. The subject was one on which he could not give an answer on the part of the Government on that occasion, but the observations of the deputation would receive his most careful attention.

SANITARY CONDITION OF THE NORTH DUBLIN UNION.

Dr. MacCabe, Local Government Board Inspector, recently inspected this workhouse, and reports in reference to its sanitary condition that the increased numbers resident during the past six months have led to overcrowding in some of the departments, and as a result there has been an unusually large number of cases of fever and other infectious diseases transferred to Cork-street and Hardwicke Fever Hospitals. By a recent arrangement observation wards have been provided in the workhouse, a provision which will tend to prevent the spread of infectious diseases in future; and the guardians are considering the necessity of providing shed accommodation within the Union, but outside the city, for the reception and treatment of infectious diseases.

An order has been issued by the Local Government Board which will remove a serious grievance which has been felt by district medical officers in various parts of the metropolis. This order provides that, subject to the approval of the Local Government Board, it shall no longer be requisite that a metropolitan district medical officer shall be called upon in every case to reside within his district. There are parts of London where it has been found impracticable for a medical officer to secure a suitable residence within his district, and other parts where a substantial injustice has been done to the medical officer by a strict adherence to the rule of residence, without advantage to the working of the district. It will now be practicable to remove those difficulties on sufficient cause being shown to the Local Government Board.

Dr. Archer Farr, the medical officer of health for Lambeth, having been called upon by the Sewers and Sanitary Committee of his Sanitary Authority to prepare a special report on the number of beds Lambeth should contract for, under the Poor-law Amendment Act of 1879, in the Metropolitan Asylums Board Hospitals, has reported that he is unable to express an opinion on the subject until he can obtain some clearer knowledge of the mode in which pauper and non-pauper cases will be discriminated by the Asylums Board.

Mr. Clare Sewell Read has written a letter to *The Times*, expressing his regret that he was unable to take a part in the deputation of the British Medical Association to the President of the Local Government Board on the 26th, to protest against the Vaccination Acts Amendment Bill. He had been influential in causing a similar provision to that now proposed being thrown out of the Amending Bill of 1871, and had he known of the proposed deputation he should have volunteered to be a member of t.

Metropolitans who are desirous to study the pig-nuisance may do so, it appears, very conveniently in Arthur-street, Chelsea, which rejoices (or rejoiced a few days ago) in 115 of these interesting and useful inmates. A proposition submitted to the Vestry for prohibiting the keeping of pigs in thickly populated neighbourhoods, and doing away with this particular relic of rural Chelsea, was, notwithstanding that it was supported by piteous complaints of "dreadful smells," rejected by a majority of *one*.

It is proposed by the Metropolitan Asylum Board to make additions to their Deptford Hospital, so that cases of fever as well as of small-pox may be received and treated there.

Mr. Hawkins, the Inspector of Anatomy for the Home Office, attended a meeting of the Sanitary Authority for St. Pancras on the 24th inst. with reference to the alleged nuisance from the private dissecting-room in the disused burial-ground of St. George-the-Martyr. Mr. Hawkins expressed the opinion that the complaints were not justified either by the situation or the management of the building, and the Sanitary Authority passed a resolution in accordance with this view of the question.

The Medical Officer of Health for Greenock (Dr. James Wallace) reports a mortality for the five weeks ending 3rd July equal to an annual rate of 16·2 per 1000 population, compared with 18·7, 17·7, and 21·2 for the period of the years 1877, 1878, and 1879 respectively. The returns of infectious sickness included six cases of typhus (and probably four other cases), all, with one exception, connected with cases noted in previous reports.

A batch of twenty persons were recently summoned before the Bedford Borough Bench of magistrates for refusing to have their children vaccinated. In each instance the defence of "conscientious scruples" was urged, and apparently accepted, for the Bench inflicted, it is reported, a nominal fine of sixpence in every case, remitting the costs altogether! This lenient course in cases of this class has been followed by the Bedford Bench, it is asserted, for some time back.

Clapham, it appears, objects to having an apparatus for the disinfection of clothes within its precincts. Things that require disinfection, according to the local magnates, should be destroyed by fire. Besides, an apparatus would cost £100. Of course, destruction of infected things is not to be effected without cost, as proprietors have to be indemnified. Obviously the way out of this economical difficulty is neither to destroy nor disinfect!

The Metropolitan Asylum Board, at the request of its solicitors, drew a cheque the other day for £1989 16*s.* 10*d.*, the taxed costs of the plaintiffs at the last hearing of the Hampstead Hospital case. It was stated that it was extremely doubtful whether the pending further proceedings in this case would be heard before the adjournment of Parliament.

The Local Government Board have approved of the scheme proposed by the Cavan Town Commissioners for supplying this town with water. The Commissioners have selected Beaghy Lake as the source of supply, and from it a sufficient amount can be obtained for all necessary purposes.

VITAL STATISTICS.

HEALTH OF LARGE ENGLISH TOWNS.

THE fatality of infantile summer diarrhœa showed a further increase last week, but the total mortality was again considerably below the average. In twenty of the largest English towns, estimated to contain in the middle of this year seven and a half millions of persons, or nearly one-third of the entire population of England and Wales, 5217 births and 2955 deaths were registered last week. The births exceeded by 32, whereas the deaths were no less than 320 below, the average weekly numbers during 1879. The deaths showed, however, a further increase of 63 upon the exceptionally low numbers returned in recent weeks. The annual death-rate per 1000, which had been but 18·9, 19·2, and 20·1 in the three preceding weeks, further rose last week to 20·6. During the past three weeks of the current quarter the death-rate in these twenty towns has averaged 20·0 per 1000, against 23·0 and 17·5 in the corresponding periods of 1878 and 1879. The lowest death-rates in the twenty towns last week were 13·3 in Nottingham, 13·9 in Plymouth, 14·0 in Newcastle-upon-Tyne, and 16·0 in Hull. The rates in the other towns ranged upwards to 22·7 in Salford, 22·8 in Sunderland, 23·7 in Leicester, 24·7 in Wolverhampton, and 26·0 in Liverpool. The high death-rates in Salford and Leicester were mainly due to excessive zymotic fatality.

The deaths referred to the seven principal zymotic diseases in the twenty towns, which had steadily increased from 406 to 567 in the six preceding weeks, further rose to 636 last week; these included 337 from diarrhœa, 108 from scarlet fever, 74 from whooping-cough, and 63 from measles. The annual death-rate from these seven diseases averaged 4·4 per 1000 in the twenty towns; whereas it was but 0·7 in Plymouth, it ranged upwards to 7·3 and 7·6 in Brighton and Leicester. Scarlet fever showed the largest proportional fatality in Sheffield, Norwich, Salford, and Bradford; and measles in Leicester. Two deaths were referred to diphtheria in Leicester. Small-pox again caused but three deaths in London, and not one in any of the nineteen large provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 191 and 200 at the end of the two preceding weeks, were 198 on Saturday last; 22 new cases of small-pox were admitted to these hospitals during the week, against 17 and 13 in the two previous weeks. The Highgate Small-pox Hospital contained 9 patients on Saturday last.

The deaths referred to diarrhœa in the twenty towns, which in the five preceding weeks had steadily increased from 51 to 258, further rose last week to 337, and included 202 which occurred in London. The annual death-rate from diarrhœa averaged 2·3 per 1000 in the twenty towns; it was equal to 2·8 in London, while it did not exceed 1·8 in the nineteen provincial towns. The highest death-rates from diarrhœa among these towns were 4·9 in Brighton, 3·6 in Leicester, and 3·1 in Salford.

The deaths referred to diseases of the respiratory organs in London, which had been 171 and 176 in the two preceding weeks, fell to 161 last week, and were 2 below the corrected average in the corresponding week of the last ten years. The annual death-rate from diseases of this class did not exceed 2·3 per 1000 in London; it was equal to 4·9 in Liverpool, and 3·4 in Salford.

HEALTH OF SCOTCH TOWNS.

In eight of the largest Scotch towns, having an estimated population of rather more than a million and a quarter persons, the annual death-rate, which had been 20·9, 20·4, and 18·6, in the three preceding weeks, rose again to 20·6 last week, and was identical with the average rate in the twenty large English towns. The rates in the eight Scotch towns ranged from 11·6 and 13·6 in Aberdeen and Perth, to 22·9 and 29·7 in Glasgow and Paisley. The fatal cases of the seven principal zymotic diseases in the eight towns were 107, against 97 and 109 in the two previous weeks; they included 39 from diarrhœa, 21 from whooping-cough, 16 from scarlet fever, 13 from measles, 12 from diphtheria, and 6 from fever. The annual death-rate from these seven diseases averaged 4·3 per 1000 in the eight towns, against 4·4 in the large English towns. No zymotic death was registered in Perth; whereas the rate from these seven diseases ranged upwards to 4·4 in Leith, and 6·0 in Glasgow. The fatal cases of diarrhœa in these eight towns further rose last week to 39, which were, however, not equal to a higher rate than 1·6 per 1000; whereas the death-rate from this disease averaged 2·3 in the large English towns. In Glasgow 27 of the 39 deaths from diarrhœa were recorded, showing a rate of 2·4 per 1000. Twelve of the 13 fatal cases of measles, and 10 of the 21 deaths from whooping-cough, also occurred in Glasgow. The 12 deaths referred to diphtheria included 5 in Glasgow, and 5 in Edinburgh; and of the 6 deaths referred to fever, 5 occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs (bronchitis, pneumonia, and pleurisy) in the eight Scotch towns were 69 last week, against 90 and 58 in the two preceding weeks; the annual death-rate from these diseases was equal to 2·9 per 1000, against 2·0 in London. The causes of no less than 23 per cent. of the deaths registered in these Scotch towns last week were uncertified; while in the English towns the proportion did not exceed 2·5 per cent.

THE HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had declined in the six preceding weeks from 42·5 to 30·3, further fell last week to 30·2, a lower rate than has prevailed in that city since the end of October last. The average death-rate during the past three weeks has, however, been 30·6 per 1000, against 20·2 in London and 18·3 in Edinburgh. The 182 deaths in Dublin last week included 42, or 23 per cent., which were referred to the seven principal zymotic diseases, against 53, 47, and 45 in the three preceding weeks; 9 resulted from small-pox, 11 from scarlet fever, 7 from fever (including typhus and typhoid), 7 from whooping-cough, 4 from diarrhœa, 3 from measles, and 1 from diphtheria. The annual death-rate from these seven diseases was

equal to 7·0 per 1000 in Dublin, against 5·0 in London, and 3·4 in Edinburgh. The 9 fatal cases of small-pox showed a further slight decline from recent weekly numbers; whereas those of scarlet fever and fever were somewhat more numerous. The deaths from measles were fewer than they have been in any week since the middle of May. The fatality of diarrhœa was considerably smaller in Dublin last week than in most of the large English towns.

OFFICIAL MORTALITY STATISTICS IN QUEENSLAND.

A supplement to the *Queensland Government Gazette*, which has recently come to hand, contains a report on the vital statistics of Brisbane and its suburbs for the month of March issued by the Registrar-General. The population of the city and suburbs is estimated at 32,012, and 43 deaths are reported as having occurred during the month. Instead, however, of giving, as is now done in nearly all parts of the civilised world, the equivalent annual rate of mortality per 1000 persons living, the Registrar-General of Queensland gives the percentage of the deaths in the month to the total population, which is valueless for comparative purposes. It is stated that the deaths in the month in Brisbane were equal to 0·13 per cent. of the estimated population. This gives no clue to the annual rate of mortality, which we calculate to have been not higher than 15·8 per 1000 of the population. We will venture to suggest to Mr. Jordan, the Registrar-General, that, as his figures are published in the official *Gazette* for general information, their utility would be much enhanced by the publication of the equivalent annual rate of mortality. It is noticeable that the death-rate in the suburban portion of Brisbane appears to be considerably higher than it is within the municipality.

HEALTH MATTERS GENERALLY AT HOME AND ABROAD.

WOOLSORTER'S DISEASE AT BRADFORD.

Another death from the woolsorter's disease has occurred in the neighbourhood of Bradford, and has been the subject of a coroner's inquest. The deceased, a man forty-nine years of age, named James Greenwood, was engaged in sorting "inferior mohair" at the works of Messrs. John Foster and Son, at Queensbury. From the evidence it appeared that the wool is washed before sorting. The deceased complained of pain in the limbs on the 17th inst., but continued at work until the 22nd, when he was obliged to desist. He was restless and sleepless during the night; and when seen by a medical man next morning was in a state of collapse, his other symptoms simulating bronchitis. He died at noon, twenty-four hours after leaving work. A post-mortem, made by Dr. Brittan together with Mr. Spear, the Medical Inspector of the Local Government Board, showed that the cause of death was anthrax.

As we mentioned two or three weeks ago, some cattle died of splenic fever at a farm at Harden, upon which the washings of Van mohair were distributed. An interval of time has elapsed since these cases, this interval coinciding with the cessation of work at the Harden Mills. We now learn that another animal, this time a sheep, pastured in the same fields, has died of the same disease, and there is some evidence that this occurred coincidently with a resumption of the washing at the mill. The carcase was examined by Dr. Roberts, Medical Officer of Health for Keighley, and microscopic examination showed conclusively that the disease was splenic fever.

The interest excited by the inquiry into the disease does not seem at all to have abated. We learn from the *Bradford Observer* that the manufacturers are taking measures for concerted action in the washing of all noxious wool. At a recent meeting they passed a series of resolutions, based in some degree upon the recommendations of the coroner's jury in a former case, which we have already given (*vide* THE LANCET, June 19th, p. 977).

The following is the text of the resolutions of the employers, which have been submitted to the Sanitary Committee of the Corporation:—

1st. That all Van mohair, camels' hair, and Persian wool, and all damaged wools, are noxious, and must be dealt with before sorting.

2nd. That all average mohair, Cape hair, Peleton and alpaca, are to be sorted as usual (damaged excepted).

3rd. That, in dealing with noxious wools, before a bale is opened it shall be steeped in hot or cold water for a period of not less than ten hours. In case the covering does not freely admit the water it shall be opened so as to do so.

4th. That, after the bale has been in the water the necessary time, the hair or wool shall be placed in a sud of hot water, and washed, then passed through rollers, partly dried, and sorted whilst still damp, as early as possible after washing. The heat of the water to be 100 to 120 degrees.

5th. That sorting-rooms shall be well ventilated, the floors swept daily, the walls and ceilings swept once in three months and thoroughly cleansed, and the walls lime-washed with lime mixed with carbolic acid once in twelve months.

6th. That no bale-wool shall be stored in the sorting-room, and no wool, hair, or other material shall be kept in the said room so as to interfere with the proper ventilation thereof.

7th. That no meals shall be taken in the sorting-room, or food kept there. Also, that proper provision be made for the sorters to wash in or near the sorting-room.

It is suggested that these regulations should be submitted to the Local Government Board for their sanction, and that, if necessary, steps should be taken to obtain a legal enactment. But it is clear that, pending the issue of the inquiry now being carried on by the Medical Department of the Board, no such regulations can be adopted; and it may very probably be found that the suggested regulations are insufficient to meet the requirements of the case.

THE WELBECK POISONING CASE.

As the case of poisoning at Welbeck now stands, it seems probable that the cause of the numerous instances of sickness following upon the consumption of beef and ham sandwiches at the sale, is to be assigned to a peculiar state of change in the meat, short of putridity, after its exposure to sewer air. It would appear that in the intervals of the sale the meat was stored in a room in which was the untrapped inlet of a drain which communicated directly with the system of sewers of the mansion, and there is evidence to show that it lay there in an atmosphere highly charged with sewer air. Dr. Edward Seaton, the medical officer of health for Nottingham, gave evidence at the adjourned inquest on the fatal case of William Wilkinson very much to the point. He stated that nine cases of individuals suffering from symptoms similar to those the deceased had suffered from, and all of whom had been at the Welbeck sale, had come under his observation at Nottingham. His opinion, after what he heard, was that it was extremely probable that the state of the meat being slightly putrid from poisonous air from drains, was such as would cause the symptoms. He had met with like cases arising from the consumption of meat which had undergone some change. He had in his recollection a group of six persons, in two families, in which the symptoms were somewhat similar, though not in all respects, but which were unquestionably due to the eating of meat short of putridity. Dr. Ballard, of the Medical Department of the Local Government Board, was present at the inquest, and gave assistance to the Coroner in questioning the witness on the medical and hygienic aspects of the inquiry. The jury returned the following verdict in the particular case under their consideration: "That the cause of death was English cholera induced by eating unwholesome meat at Welbeck, but how it became contaminated there is no positive evidence."

POONA POUDRETTE.

The *Gazette of India* for the 19th ult. contains an important memorandum by the Superintending Engineer for Irrigation on the manufacture of poudrette at Poona, and a report on the same subject by Mr. Narso Ramchandra, the Secretary of the Poona Municipal Committee. It would appear that by a mixture of night-soil and of ashes, resulting from the burning of the street refuse, house-sweepings, and dust-bin refuse, a poudrette is formed of the greatest value in garden cultivation, and which is in increasing demand. The night-soil, spread between thin layers of the ashes described, and first sifted, is dried in the open air, under the sun in the fine season, under sheds in the rainy season. When the requi-

site degree of dryness is reached, the night-soil and ashes are then thoroughly mixed together, and more sifted ashes added. The material is then ready for distribution. At first the native gardeners hesitated to take the poudrette; now the manufacture does not meet the demand, and it is frequent for payment to be made from four to six months in advance, in order to secure a supply. The nuisance experienced in the process of manufacture appears to be comparatively slight, stink not being experienced at a distance of more than fifty yards to windward, and of 150 yards to leeward of the drying tanks. The financial results are regarded, even in the present state of the experiment, as highly satisfactory, the profit from the sale of the poudrette during the first year having reduced the scavenging expenses of the municipality 5000 rupees. The sale of the poudrette, which in 1874–5 realised 766 rupees, in the nine months April to December, 1879, realised 7438 rupees.

THE "FEVER" IN IRELAND.

Dr. Nixon's further reports on the state of fever in the Swinford Union, County Mayo, confirms the impression derived from his previous reports that maculated typhus is widely disseminated there, even in the remoter districts. The incidental descriptions he gives us of the conditions under which he found the disease make the reader almost despair of the sanitary future of the localities to which the descriptions refer. Any way his sanitary prescriptions seem almost a mockery in face of severe dearth, and what to the English reader has the aspect of hopeless impoverishment and degradation. Writing of the small village of Faheens, three miles from Swinford, he says, "The condition of the people here is, however, extremely wretched. In most of the cabins cattle and pigs are kept in the room that is occupied. The sewage matter is partly carried off by an open drain which runs through the centre of the floor, whilst stagnant pools, containing all sorts of offensive matter, lie in front of the cabins. In this village there is no sewerage of any kind, and no road for a car within more than a mile's march. The food of the people here consists almost exclusively of Indian meal without milk." Of a village in another part of the Swinford district he writes:—"Nothing could exceed the complete absence of sanitary arrangements in this village. There was fully eight inches of manure in one cabin in the room where seven persons lived, and the woman of the house explained that she could not clear it out, as then she would have no manure." Again, writing of a house in the village of Ballintadder, he says, "Five members of the family had been ill for some weeks, and at the time of my visit three were still confined to bed; all appeared to have suffered from typhoid fever. The cabin in which these persons lived was extremely offensive, and on entering it the smell from the excessive amount of organic matter in the air was almost overpowering. In the small single-roomed cabin in which the three patients—the mother and two children—lived, I counted at the time of my visit three cows, a number of chickens, three cats, and a large dog."

Mr. W. E. Forster, referring in the House of Commons to certain suggestions of Dr. Sigerson and Dr. Kenny relating to districts in Mayo, observed that the Local Government Board (Ireland) were doing their utmost in the matter, but it should be remembered that the sanitary condition of the cabins in those districts had been very bad for generations, and it was a matter which could not be remedied in a day.

SICKNESS AT SIMLA.

The Indian papers report a severe and troublesome epidemic of diarrhœa at Simla, which had attacked Europeans of all classes during the month of June. In addition to the usual "hill diarrhœa," from which new arrivals in the Himalayan Sanitaria are extremely prone to suffer, this present sickness was remarkable for its persistence, its constant relapses, accompanied by languor and great debility; vomiting of a bilious character was present more or less in the early stage, with, in some cases, a degree of lassitude and prostration that almost amounted to collapse. No case had terminated fatally. The weather during May and June had been unusually hot and muggy, and the epidemic was regarded by the medical officers on duty at Simla as probably due to atmospheric causes. The setting in of the monsoon at the end of June would, it was hoped, clear the atmosphere and wash away the disturbing elements.

DAIRY FARMING IN SWITZERLAND.

The *Journal de St. Pétersbourg*, quoting from the Russian journal *Béreg*, states that the milk industry of Finland is not only the largest in the Russian Empire, but in Europe generally. Under the fostering care of the Government this industry has of late years undergone great development. There are now seventeen schools in Finland for the training of persons in the management of milk. The course of study occupies two years. During the first year the student is taught the physiology of the cow, the discrimination and treatment of the diseases to which it is subject, the mode of rearing calves, and the general management and treatment of kine. In the second year the course of treatment embraces a knowledge of the constituents of milk, the influence of temperature upon them, and the use of the thermometer in the management of the fluid, the different methods of manipulating milk and preparing butter and cheese, and book-keeping. In order to encourage the cultivation of this industry the students leaving the schools receive subsidies of from 500 to 1000 Finland marks, to help in the organisation of farms. The results obtained by this mode of procedure are said to have been most brilliant.

YELLOW FEVER.

The Royal Mail Company's cargo-steamer *Derwent* has arrived at Havre infected with yellow fever. In the course of the homeward voyage eighteen cases of the disease occurred on board, and the chief officer and two of the crew died of it. The cases which recovered are all reported convalescent, and the ship will be released from quarantine if after three days' detention no other cases of sickness manifest themselves. The importation of yellow fever into New York Harbour is also reported by a steamship, the *Colon*, from Aspinwall, which arrived there on the 15th ult. A case occurred on board the day after the ship left Aspinwall, and two cases were removed from the ship into the quarantine hospital on Swinburne Island, New York Harbour.

DIPHTHERIA IN RUSSIA.

A considerable diminution in the prevalence and mortality of diphtheria is reported in the Government of Poltava. This is attributed to the measures of disinfection which have been adopted; but, it is added, both the peasant and the clergy object to these measures. There has been an outbreak of the disease in the districts of Tchéboksary and Kazan; but by the prompt despatch of a medical staff of nurses to the localities, destroying infected material by fire (the proprietors being indemnified), forbidding the exposure of the corpses in churches, and covering them when placed in the grave with quicklime, the disease has been arrested in its progress.

FAMINE IN INDIA.

The first part of the Report of the Indian Famine Commission has been issued; it relates to famine relief, and is a most comprehensive document. After some preliminary sections, it discusses the rainfall of India, the history of past famines (freely illustrated with maps), the general considerations affecting the administration of State relief, and then enters upon the consideration at large of practical recommendations.

NOXIOUS VAPOURS.

Among the measures destined to be abandoned in Parliament during the present session is unfortunately that of Noxious Vapours. Lord Enfield, however, speaking for the President of the Local Government Board, has stated from his place in the House that he earnestly hopes early next session to introduce a measure to carry out the recommendation of the Royal Commission.

This week at the Dublin Police-court two men were fined forty shillings each for having obstructed a sanitary officer who wished to remove a child suffering from scarlatina to hospital, there being several healthy people occupying the same room as the sick child.

The hospital for infectious diseases at Cuninghar hills, Aberdeen, says the *Weekly Free Press*, was opened on the 19th and closed on the 26th of June, two patients having been successfully treated for small-pox in the interval.

The erection of a hospital for infectious diseases at Uxbridge is decided upon.

THE SERVICES.

WIMBLEDON MEETING.

The camp at Wimbledon was, as in previous years, under the medical charge of Surgeon-Major Elkington of the Grenadier Guards, and Acting-Surgeon Pocklington, 11th Surrey Rifle Volunteers. The meeting passed off without any accident, and, with the exception of considerable prevalence of slight diarrhœa at first, the health of the camp is reported to have been good.

ADMIRALTY.—Staff-Surgeon R. L. Bett has been promoted to the rank of Fleet Surgeon, with seniority of Feb. 15th, 1880. Fleet Surgeon R. R. Beaumont, 1869, to Haulbowline Hospital. Surgeon M. M. R. Mackenzie, 1879, has been appointed to the *Boadicea*, vice Dr. Gordon, promoted to the rank of Deputy Inspector-General. Surgeon Alexander Blood Trousdell, M.D., has been promoted to the rank of Staff-Surgeon in Her Majesty's Fleet, with seniority of 24th inst.

ARMY MEDICAL DEPARTMENT.—Surgeon-General William Munro, C.B., has been appointed to succeed Surgeon-General Huntley Gordon as Principal Medical Officer at Gibraltar. Dr. Munro has for several years conducted the duties of Head of the Medical Branch of the War Office, Whitehall Yard. Surgeon-Major A. Guthrie has been appointed Principal Medical Officer of the Reserve Division Afghan Field Force, vice Deputy Surgeon-General Hanbury, transferred to the Khyber Division.

Correspondence.

"Audi alteram partem."

"SALICIN AND THE SALICYLATES IN RHEUMATIC FEVER."

To the Editor of THE LANCET.

SIR,—I have been much interested by the excellent annotation in THE LANCET of June 5th, headed "Salicin and the Salicylates in Rheumatic Fever." It falls to my lot to see but few cases of rheumatic fever. My experience, of course, has been much greater as to cases of chronic and articular rheumatism, sent to Buxton for relief from the use of its mineral water, and as to cases of gout. In these cases I have very frequently made use of both salicin and the salicylates, and at times with much, and at times with signal benefit. I am of opinion that they are sometimes of at least as much value in chronic as they can be in acute cases, exercising probably in some degree a restorative action, and aiding the system in the elimination of morbid material. To some extent the same value attaches to the use of quinine, arsenic, or the other well known and trusted antiperiodic tonics, sustaining or ministering to the general tone, and thus tiding over the struggle between the system and the disease, and perhaps helping to secure or promote the elimination of the hampering and irritating morbid products. What, however, I would seek to suggest is, that the treatment of acute rheumatism may not consist only in the lessening of the inflammatory and febrile struggle, which may be done by many other means, such as alkalies, salines, diaphoretics, aperients, or by colchicum, &c., or in the use of such remedies as will lower the febrile condition, as evidenced by the reduction of abnormal temperature, such as quinine, salicin, or even alcohol in carefully regulated doses, but may demand, as the primary consideration, the avoidance of any means by which elimination can be interfered with, and the use of any means by which it may be promoted, either by restorative or emulgent treatment. It need not be said that the relief of gout pains, and of the violent paroxysms of acute gout, may be commonly secured by the use of colchicum; but that the relief may have to be paid for by the supervention of an indolent form of the disease, diminished elimination of gouty material, increase of chalky deposit, and greater general malaise and debility. Every means of relief to gouty conditions, no matter whether acute or chronic, must embrace the conservation of the general strength as much as may be, and a constant use of all the means that will help to secure the fullest elimination of the morbid products. I cannot but feel that all this may have a considerable bearing upon the moot question of the use, or relative use, of salicin or the salicylates in acute rheumatism. There can be no doubt that a morbid product is the necessary outcome of the disease. Febrifuge treatment on the one hand, or restorative treatment on the other, will not necessarily aid the elimination of this product. In cases where the febrifuge effect of salicin is indicated, or its possibly restorative value is needed, it might be aided as to eliminating power by judicious salines, diaphoretics, diuretics, or aperients, and the utmost advantage be thus obtained from its exhibition. In cases where neither its power of lowering temperature nor its restorative value is needed it might be wisely withheld, and a more simple regard be given to action upon some of the emulging organs or tissues. There can be no doubt that rest in bed, with what diaphoresis can be secured by bedclothes, warm-water compresses, and tepid or cool drinks, with or without the aid of alkaline or diaphoretic medicines, will often prove to be the best treatment for any of the acute forms of disease primarily requiring relief by elimination of morbid material; and that in either acute or chronic cases of this character the best treatment may consist in the free application of cotton-wool to the parts affected, and a careful regulation of the ingesta, avoiding if possible the use of stimulants altogether.

I think the profession is much indebted to Dr. Greenhow for his careful report upon these comparatively new remedies; but I should be sorry to think that they may not retain a position of much value in the treatment of certain cases and conditions of both rheumatism and gout; while I feel that we are not likely to have specifics for any disease that would be suitable to all its instances, that there are no two cases alike, that one case demands one primary consideration, another requires some other help. The febrile heat, or the weakness, or the congestive engorgement, or defective elimination, may be the principal indication for treatment; but any treatment that does not include the elimination of morbid products in such a disease as rheumatism must be imperfect, and be attended with consequences that must be disappointing.

I am, Sir, most faithfully yours,

WM. H. ROBERTSON, M.D., F.R.C.P.,
Consulting Physician to the Devonshire Hospital and Buxton Bath Charity.

Buxton.

COPPER TEST CAPSULES FOR SUGAR.

To the Editor of THE LANCET.

SIR,—The thanks of the profession, I am sure, are due to Dr. Pavy for the suggestion which has rendered the application of the copper test for sugar more convenient and its constituents more stable.

The substitution of the glass stopper for the sealing-wax cork will, no doubt, in great measure prevent the damp from acting on his "test pellet"—the only objection that has been hitherto brought against it. At the same time it must not be overlooked, that it may happen that the stopper will not be always replaced immediately. Moreover, a glass-stoppered bottle is not a very convenient article to carry about with one.

I have, therefore, ventured to suggest an improvement on Dr. Pavy's "pellet," by enclosing a small quantity of Fehling's solution in hermetically-sealed glass capsules, each containing about one cubic centimetre of the test solution. Air being thus excluded, the solution will keep almost an indefinite time. The size of the capsules being small, two or three can be conveniently carried wrapped in a bit of cotton-wool either in the ordinary pocket-case or waistcoat-pocket, without fear of breaking. They are made by Mr. Martindale, of 10, New Cavendish-street.

The test capsules are an improvement on the fine tubes that have been used for the same purpose for some years, because from their size and shape they are less likely to break, and are therefore more portable.

I am, Sir, yours truly,

CHARLES HENRY RALFE.

Queen Anne Street, W., July, 1880.

FOREIGN BODIES SWALLOWED BY CHILDREN.

To the Editor of THE LANCET.

SIR,—We are often consulted by mothers as to what is best to do in cases where children have swallowed foreign bodies; and such things as coins, buttons, marbles, &c., are common enough, and are generally passed without causing any disturbance whatever. The following case appears to me unique, from the peculiarity of the body swallowed.

On the afternoon of April 10th last I was consulted by a lady as to what was advisable to do with her child, a girl aged about three years, who had swallowed the tongue of a hand-bell with the chain attached. The child was playing on the floor with the bell, and was seen by an elder sister suddenly to struggle in a suffocative paroxysm. With praiseworthy promptitude, she held the child head downwards and thumped her well on the back. In a few seconds the child got relief, the obstruction passing down; and on the mother hastening to the room she appeared all right.

Knowing that before the tongue could be separated from the bell some of the links must be open, I considered it a very dangerous thing, as the open link might catch in any part of the intestine; I accordingly ordered the child to be fed for the next few days on porridge, hard-boiled eggs, cheese and bread, with very little fluid, in the hope that the chain would become embedded in thick stool, and so protect the alimentary canal from injury. On the following day a small motion was passed, and about noon of the second day (forty-eight hours after swallowing it) the tongue, with links attached, was passed *alone*, followed in a few minutes by a copious motion. The annexed sketch is the exact size, and will give some idea of the thing. The tongue is of brass, and weighs rather more than two drachms.

This case seems interesting from the fact that although the child was fed on constipating food, the foreign body was passed *alone*, and that, such being the case, there was not a single bad symptom then or since.

Yours faithfully,

WM. CAIRNS WICKS, M.B. Edin.,
Physician to the Hospital for Sick Children, Newcastle-on-Tyne.

PAGET'S DISEASE OF THE NIPPLE.

To the Editor of THE LANCET.

SIR,—As I believe it to be important that the fatal effects of the disease of the nipple, to which Sir James Paget has directed attention, should be widely recognised, I venture to send you a few notes regarding a case which has been reported to me by my friend, Dr. Johnston, of Shanghai. Dr. Johnston, following the examples of previous observers, writes of the disease as an eczema, a term that on practical as well as on theoretical grounds, I think it very desirable should cease to be applied to this affection.

Mrs. E—— was sent from Pekin to Shanghai to be under Dr. Johnston's care on account of a tumour which had formed in the breast, and told him that the nipple had been affected with superficial disease for more than a year before she was aware of the existence of a tumour. Dr. Johnston operated, but the disease recurred within six months, and the patient died.

Before going to China she had been under the care of Mr. Lockhart, of Blackheath, to whose kindness I am indebted for the following note. Writing to me on February 3rd of this year, Mr. Lockhart remarks:—"When Mrs. E—— was in London, about three years and a half ago, I saw her several times. She had eczema round the nipple, extending from the nipple as the centre one inch and a half all round. This proved wholly impracticable so far as curing it went. I tried all that I could suggest—lead, zinc, arsenic internally, barley water, gruel, and much else, but the eczema remained. There was no tumour in the mamma of any kind, but I feared, as the eruption was so inveterate, that there might be something malignant about it, although I hoped on to the last of her stay in England that this would pass away. The next I heard of her was from Dr. Dudgeon, of Pekin, that she had cancer of the mamma."

In order that sufficient data may be obtained for the construction of trustworthy rules for the differential diagnosis between what, with Mr. Erichsen, I prefer to call Paget's disease and simple eczema of the nipple, there are some points regarding which in any given case information is especially desirable, and I risk the suggestion that in recording other cases reporters would do well to state whether the affection began on one small localised point of the nipple and remained so localised for any length of time, and how long it was before the whole surface of the nipple became affected; whether the affection of the skin of the areola was from the first sharply demarcated towards the healthy skin, and whether, as the disease spread, the sharp line of demarcation was never lost; whether the border of the diseased skin was elevated; whether it felt hard when compressed from the margin between the fingers; the nature of the discharge; the presence or absence of pain and itching; and whether before there were any signs of disease there had been a "weeping" from the nipple. By comparing the symptoms in a sufficient number of cases with those present in the obstinate eczemas of which the nipple is occasionally the seat, the early diagnosis of Paget's disease, on which the safety of the patient so much depends, will become easier than it is at present.

I am, Sir, yours, &c.,

Queen Anne-street, W. GEORGE THIN, M.D.

THE DISPUTE AT GUY'S HOSPITAL.

To the Editor of THE LANCET.

SIR,—The suggestion of Dr. Harding of Whittlesea is, I a afraid, not capable of being put into practice, since a committee of "old Guyites" would have no *locus standi* with the Governors.

As far as that is of any use to them the staff have all the sympathy which we all old Guyites can give them, but that will avail them little. I would, however, make another suggestion: whether the committee now sitting, or the Board of Governors, should not take into consideration the desirability that the internal management of the hospital should be left entirely to the staff—the treasurer having nothing to do with that. The principle is the one you have consistently advocated in the case of military hospitals, where you have repeatedly pointed out that laymen (old colonels) are ridiculously out of place in the management of hospitals, such as Haslar Hospital.

This unfortunate affair, which must have grieved every Guy's man, is the outcome of certain notions floating in the brain of a well-meaning, possibly somewhat imperious, gentleman, who certainly must have a very considerable amount of self-confidence to pit his experience against a whole staff.

I have been dresser, obstetric resident house-surgeon, and house-physician at Guy's ten years ago, and consequently was at that time well acquainted with the whole management of the wards. And, on the whole, I believe the nursing and the comfort of the wards were excellent.

I think there was too much laxity as to stimulants. Many a sister has told me that she wished she did not have the care of them. But this and other details are things with which the staff could deal much better than the treasurer. Let the committee now sitting remember that "Behind the horseman rides black care." Behind them is public opinion, which will not suffer Guy's to come to harm. Let them be intent not upon adjudicating the dispute, but upon finding a remedy.

I am, Sir, your obedient servant,

T. D. L. TEMPLE, M.D. Lond., F.R.C.S. Eng.,
Old House-Surgeon and House-Physician.

St. James's-road, Hatcham, New Cross, July 12th, 1880.

To the Editor of THE LANCET.

SIR,—In a letter with the above heading which appears in to-day's LANCET, Mr. Stanley Gale, when referring to my paper on Hospital Nursing in the July number of *Fraser's Magazine*, does me an unintentional injustice. He makes it appear that I am, in some sense, an advocate for the training or employment of a number of unqualified female

practitioners, or, as he calls them, "female quacks," who are in reality imperfectly educated women, who have received some elementary instruction, when probationer nurses, in strapping, dressing, bandaging, &c. It is surely not necessary for me to deny this soft impeachment? Anyone who has read my paper will bear me out in saying that it can be made to yield no such argument from first to last.

I lay down as the first principle of successful nursing that everyone who is responsible for the conduct of this department of hospital work must be guided by common sense views. I show that there are hospitals and hospitals—viz., those with medical schools and those without. At the former class there will be a large body of students who will require for their instruction all the raw material which the wards can provide. At such hospitals no dressing or other minor medical or surgical work will be required from sisters or nurses. On the other hand, at the country and other non-clinical hospitals, all this is changed. Here a nurse is of little use unless she can undertake much of the dressing, the taking of temperatures, the testing of various matters, and a fair share of the minor medical work, which elsewhere devolves upon the student. It happens, therefore, that a nurse trained wholly at a clinical hospital, where she has few opportunities of learning dressing, &c., is of little use in an institution where there are no students and few skilled assistants. This very week I have met with a King's College nurse who had never seen a breast removed, and who was quite at sea during the operation and of little use. Here lies the kernel of the nursing dispute at Guy's. Miss Burt, the matron, thinks she can adopt one particular system to every hospital; she might just as well try to fly.

I am, Sir, your obedient servant,

HENRY C. BURDETT.

Seamen's Hospital, Greenwich, S.E., July 24th, 1880.

ENTERIC FEVER IN INDIA.

To the Editor of THE LANCET.

SIR,—As I am much interested in the subject which has lately been occupying the attention of the Epidemiological Society I cannot refrain from offering a few remarks on the subject of enteric fever as observed in India. That *enteric* fever properly so-called does exist in India, and that as a definite disease always recognisable after death in fatal cases by the pathological changes proper to it, no one will, I apprehend, attempt to deny. The question at issue seems to me to be briefly this, Is enteric fever in India due to the insanitary conditions similar to those to which it is attributed in temperate climates, or is it merely a form of the "malarial fevers"? I have always held that enteric fever in India is thoroughly distinguishable from all other forms of fever, which, more or less, simulate it at various stages, with one proviso, that the patient is seen early in the disease, and that the temperature is taken then, and regularly watched throughout the disease. Without this precaution it will be found almost impossible after the fifth day to say whether a given case is one of "enteric" (pythogenic) fever or "remittent" (malarial), and only too often nothing but the result of the "post-mortem" examination will enable us to diagnose the case with accuracy. If, however, we can take the temperature early in the disease, and in most cases if "remittent" we can do this the very first day, the course of the temperature will afford us an almost certain means of diagnosing "enteric" from malarial fever. For suppose we find the temperature 104° or 105° F on the first day, we can predict with absolute certainty that the disease will not prove to be enteric; whereas if we have a case as to the nature of which we are in doubt—e.g., given a patient in the second week with all the symptoms of remittent fever, which differs very slightly in its clinical aspect from enteric fever in the same stage—we have only to consider the temperatures of the first day or two to find ourselves able to state with a very considerable degree of certainty whether it is a case of "enteric" or "malarial" fever, whether, that is to say, we shall in the event of a fatal issue find the post-mortem appearances pathognomonic of enteric fever or not.

Taking it then for granted that enteric differs *in toto* from malarial fevers in its mode of access, I think there is no valid reason for saying that "enteric" fever is due to the same causes which induce "malarial" fevers. I admit that it is very hard to obtain positive evidence as to the "pythogenic" nature of enteric fever in India; but when we consider the following points, we may, I think, regard it fairly well proved that enteric fever in India depends upon local insanitary conditions quite as much as elsewhere.

1. Natives suffer from the disease to a considerable extent, far more so than Europeans, at least more than those who adopt the precautionary measures of filtration of drinking-water after boiling, and avoid all possible sources of fæcal contamination.

2. There is no station in India, however carefully its sanitary condition may be attended to, where the conditions for fæcal contamination of water easily accessible for drinking, though not intended for that purpose, do not exist in profusion.

3. These very conditions are those which affect the native community, who are notoriously careless about their drinking and cooking water.

Seeing, then, that insanitary conditions sufficient in themselves to cause enteric fever always exist in India—that these insanitary conditions affect the native portion of the community almost exclusively, and that this native community suffers from enteric fever in a far larger proportion than the European residents who are not so affected—it is hard to resist the natural conclusion that enteric fever in India is due to those same insanitary conditions which, when they exist in temperate climates, are recognised by the highest authorities as efficient causes of the disease in question.

I am, dear Sir, faithfully yours,

GEORGE RANKING, M.D. Cantab.,
Surgeon 6th Bengal Cavalry.

Phœnix-park, Dublin, July 15th, 1880.

CHIAN TURPENTINE IN CANCER.

To the Editor of THE LANCET.

SIR,—It is satisfactory to hear from Mr. Clay that Chian turpentine is still producing satisfactory results "in cancer of various organs." Others are not so successful as himself in their trials; and as he still holds to his former opinion, one is almost obliged to conclude that they have not been using "the true remedy." We have to depend on the honesty of those who supply our drugs, and it is difficult to believe that they take advantage of us when we ask for a supply of the genuine article. Not only would such treatment be unfair to their customers, but it would be *cruel and unkind* to their customers' patients. What are we to conclude, however, when, after trial, we find the disease still progressing? Is the remedy only a myth, or have we been deceived in the nature of the drug by the chemist? Mr. Clay still writes of success, and consequently it is difficult to doubt his word. Under these circumstances would it not be a kindness for Mr. Clay to mention publicly where he obtains his Chian turpentine? His repeated assertion gives one a hope of doing good; but when, after trial, no improvement succeeds, despair takes its place, and we feel that we have cruelly raised "false hopes" in the minds of our patients.

I enclose my card, and am, Sir, yours faithfully,

COUNTRY PRACTITIONER.

THE NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Notwithstanding the flagrant disabilities under which the naval medical service at present labours, the authorities still continue to advertise for candidates to fill its attenuated ranks. You, on the other hand, render good service not only to those of the profession, who presumably are aimed at—the wavering ones—but to those at present in the service, by bringing to public notice the injustice under which they suffer in comparison with the more liberal treatment accorded to the army. As you truly remark, "we find a difficulty in believing that such a difference of action should arise under the same circumstance affecting two bodies of our profession serving the same Government in a military or combatant capacity," and it is to be hoped that forthcoming candidates for the August examinations will well weigh your advice, and "appreciate at the commence-

ment of their career what are the possible harvests to be reaped at its end." You might with justice have added, *to contrast the difference existing during their whole career.* One could understand the action of the authorities in quietly ignoring the well-known grievances of the department if it was in contemplation to allow it, like the navigating branch, to die a natural death; but it seems this is not their wish. Judging from the persistency of their advertisements, it is, as of old, a question to be determined by the profession. Are we to be ignored? I have no doubt the answer will be given by our brethren in no uncertain tone. Three men came forward to compete for eighty vacancies last examination; let there be *none* for the next.

I am, Sir, yours, &c.,

OMEGA.

PARIS.

(*From our own Correspondent.*)

FOR some time the atmosphere of Paris has been anything but agreeable. Towards the evening an unpleasant smell—or, rather, a more unpleasant smell than usual—has been noticeable; so much so, indeed, that it has at last become offensive even to the republican nostrils of the Municipal Council. This odour has been supposed by some to emanate from the sewers, whilst others have attributed it to putrefaction in the numerous *kiosques* which adorn (or disfigure?) the boulevards. It would appear, however, that the effluvium originates outside the fortifications, in the twenty-seven *depotoirs*, or night-soil depôts, which at some distance surround the capital, and perhaps also in the sewage-boats, which are anchored in the Seine, near the Pont des Invalides. It depends in a great measure upon the absence of the disinfectants which should be used by the contractors who empty the cesspools, but who appear, from the statement of one of the municipal councillors, to have been abetted by the police in their neglect.

A list of the prizes awarded annually by the Academy of Medicine was given in THE LANCET last year, but I would again call the attention of those members of the profession who are engaged in scientific research to the fact of their existence, and to the possibility of obtaining them. As usual, a large number were not awarded this year, either because no essays were sent in, or because those which did compete were not of sufficient merit.

For 1881 the subjects are as follows:—Prize of the Academy, 1000 francs: to determine the clinical value of antiseptic methods in surgical practice. Portal Prize, 1500 francs: on the state of the uterus and its dependences in puerperal fever. Civrieux Prize, 1500 francs: on the epileptiform symptoms of hysteria. Capuron Prize, 2000 francs: the indications and contra-indications for the use of mineral waters, sea-bathing, and hydropathy in pregnancy. Godard Prize, 1500 francs: for the best work upon external pathology (surgery). Daudet Prize: upon epithelioma of the lips and its treatment. There is also a prize of 6000 francs, which was founded by Dr. Barbier, to be given to the person who shall find a curative treatment for diseases which are generally supposed to be incurable, such as hydrophobia, cancer, epilepsy, scrofula, typhus, cholera. When the prize is not awarded in its entirety, a part of it may be given as an encouragement. Your readers may be reminded that in addition to the money value of the prize itself, successful competitors acquire the title of "Laureate" of the Academy of Medicine.

Obituary.

S. B. GWYNN, F.R.C.S.

SAMUEL BETTON GWYNN, who died very suddenly on July 11th, at the age of fifty-seven, was a son of Edward Gwynn, and grandson of Edward Gwynn (senior), both former surgeons of Wem. He commenced his medical education by being apprenticed to his father, and afterwards studied at Edinburgh, and at King's College Hospital, London. He obtained his M.R.C.S. Eng. and L.S.A. diplomas in 1844, and the Fellowship of the Royal College of Surgeons in 1853.

He began general practice with his father at Wem, where he was a well-known and successful practitioner for nearly forty years. Mr. Gwynn's quiet, unobtrusive, and kindly disposition gained for him the general respect and affection of all classes, for he was not only a skilful surgeon, but also a real friend to poor and rich alike. He was for many years medical officer of the Wem Union and several Friendly Societies, and for twenty-seven years surgeon to the North Shropshire Yeomanry Cavalry. He had been failing in health for three years, but continued in active practice to the very last day of his life, his sudden death being due to heart disease consequent upon emphysema of the lungs. He leaves a widow and nine children; but his loss is deeply deplored by many besides his own family, as was testified by the hundreds who voluntarily followed his body to the grave.

ALBERT J. WALSH, F.R.C.S.I.

THIS gentleman died on Saturday last at Whitechurch, near Dublin, at an advanced age. When the Adelaide Hospital in that city was established, in 1858, Mr. Walsh was appointed one of the visiting surgeons, a post he occupied until the last few years, when failing health obliged him to resign, and he was elected consulting-surgeon to the hospital. The deceased, who until recently had a considerable amount of practice, and was a very skilful operator, was an ex-President and Member of Council of the Royal College of Surgeons in Ireland, and was formerly attached as surgeon to the Maison de Santé.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Commons, on Friday, petitions against the Vaccination Acts Amendment Bill were presented from the Edinburgh Branch of the British Medical Association, the Faculty of Physic in London, Whitechapel Board of Works, and Newton Abbot Union.—Mr. Puleston gave notice that he would move to add Dr. Farquharson to the Select Committee on the Contagious Diseases Act, in the place of Sir Harcourt Johnstone.

On Monday, Sir Trevor Lawrence asked the Parliamentary Secretary to the Local Government Board whether the attention of his department had been drawn to an allegation that a species of black mail is exacted in connexion with the certification of pauper lunatics in the Kensington Union. Mr. Hibbert replied that the officers of the Union denied that any such charge was levied. The report might have arisen owing to the great number of cases that had been sent to two particular medical officers, the reason being that they resided in the immediate neighbourhood of the infirmary.—Replying to the same hon. member, Sir W. Harcourt stated that the Government would consider during the recess the subject of the embarrassed financial position of the United College of the University of St. Andrews, with a view to seeing before next session whether any steps could be taken to relieve the College from its pecuniary difficulties.—Lord F. Cavendish stated to Mr. M. Brooks that it would not be practicable to employ women clerks in the preparation of the census returns.—Mr. Watkin Wiliams asked the Secretary to the Local Government Board whether any regulations exist defining the duties of relieving officers and medical officers of Poor-law unions in relation to orders for the supply of medical necessaries to the sick poor, and whether it is competent to relieving officers to disregard or overrule at their discretion the orders of the medical officers; and, if so, whether the Local Government Board will consider the propriety of altering the regulations in question. Mr. Hibbert replied that, whilst the relieving officers had a certain discretion in such matters, they were cautioned by the Local Government Board to be very guarded in the exercise of that discretion.—On the motion of Mr. Meldon, a return was ordered of the names of all medical officers of workhouses and dispensaries in Ireland, who, since the passing of the Medical Officers Superannuation Act, 32 & 33 Vic. c. 50, have resigned their offices and applied to their boards of guardians for superannuation allowances under that Act, with the causes for such resignation; the ages and length of service as Poor-law Medical Officers of each person at date

of resignation; the result of such application to the guardians; and the reason, if any, given by the said guardians for refusing the application.

On Tuesday, further petitions against the Vaccination Acts Amendment Bill were presented from Manchester, the British Medical Association (two), Warrington, Royal College of Surgeons (England), Hackney, Saltley, and Macclesfield.—Mr. Meldon asked the Chief Secretary to the Lord Lieutenant of Ireland if it is the case that the medical officer of the Crossagar dispensary district in the union of Banbridge, having after forty years' service applied for superannuation on the ground of broken-down health, a meeting of the guardians has been summoned to consider such application, and to pass a resolution "to record on the minutes their approval of the manner in which the medical officer has filled such office for a period of forty years, but that the guardians cannot add to the rates by granting any retiring allowance." And, if the Government will promote or support a measure to make the superannuation of Poor-law medical officers, in proper cases, compulsory on boards of guardians?—Mr. Forster pointed out that the resolution had not yet been passed, and therefore the question was somewhat premature. He would defer any answer for the present.—Mr. Macdonald asked the Secretary of State for the Home Department if his attention had been called to an inquest held on Wednesday, the 14th instant, at the White Horse Tavern, St. Matthew's, touching the death of a youth named William Ball. If it were correct that he died from the effects of poison inhaled when following his employment as a copper-bronze printer. Whether there were any provisions in the Factory and Workshops Act to prevent youths from being employed in such an atmosphere as will cause the death of those that may be employed where such work is carried on. And, if there were no provisions now in existence, would he cause the suggestions made by Dr. Tidy to be carried out, which were as follows: "the free use of milk or other albuminous fluid by the workpeople employed; the wearing whilst engaged at the work a cotton-wool respirator of sufficient size to cover efficiently both mouth and nostrils; that the bronzing should be carried out in a separate compartment or room, and not in the general workshop, in order as far as practicable to limit the evil; that a dress of glazed calico or like material tied round the neck and waist should be worn by those engaged at the work, and that this dress should be removed before leaving the compartment where the process is conducted; that strict cleanliness should be enforced."—Mr. A. Peel, the Under Secretary, replied that it was true that William Ball died from the effects of poison inhaled whilst following his employment as a copper-bronze printer, but there were no provisions in the Factory and Workshops Act preventing the employment of youths in copper-bronze printing, and the Secretary of State had no power to extend the provisions of the Act. The Act did provide for ventilation, but ventilation in a case of this kind was practically inoperative, the bronze dust being of such a heavy character. The Secretary of State could only call attention of employers in the trade to the danger of the present conditions of working, as shown in this question, and direct attention also to the suggestions of Dr. Tidy, and to the usefulness of a "dusting-off" machine, which had been found very beneficial in getting rid of the dust. Mr. Macdonald, therefore, gave notice that on Monday he would ask the Home Secretary whether, considering that Wm. Ball was poisoned while in the performance of his duties, he would not direct the public prosecutor to take up the case, and have it tried, as a warning to employers of labour who keep their workshops in such a condition that the health and the lives of their workers were destroyed. He considered this a most disgraceful case, and—(cries of "Oh!" and "Order," amidst which the hon. gentleman resumed his seat).—Mr. Puleston gave notice that on Thursday he would ask the Secretary of State for the Home Department whether his attention has been called to the present condition of Guy's Hospital and to the statements made by the senior physician in a letter to *The Times* of Saturday last, and to the report of the inquest since held in the hospital; and whether, as the hospital is subject to the control of Parliament, he will take steps to remedy a state of affairs which is calculated to impair the usefulness of the institution.

On Wednesday, in reply to Mr. Hicks, Mr. Gladstone said no restriction would be placed on the use of any materials in brewing, except such as were absolutely mischievous. The substance called saccharum, or condensed maize wort, would be charged by the excise officers as sugar. At the close of the sitting the Lunacy Law Amendment Bill was withdrawn.

On Thursday, the chief interest, of course, centred upon the news from Afghanistan. From the lists read by the Marquis of Hartington it appeared that amongst the officers of General Burrows's force who reached Candahar in safety were Surgeon-Major Harvey, Horse Artillery; Surgeon Burroughs, 3rd Scinde Horse; J. Eaton, 16th Native Infantry; and A. Dane, 1st Native Infantry. The answer given by the Home Secretary to Mr. Puleston's question, with regard to the recent inquest at Guy's Hospital, was as follows:—I have no power to interfere, but the unfortunate circumstance to which this question relates is the subject of judicial investigation, so that it will be thoroughly investigated in a court of law. I have confidence that the Governors of Guy's Hospital will consider the matter very fully.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having passed the required examination for the diploma, were duly admitted Members of the College at a meeting of the Court of Examiners on the 22nd inst.:—

Briscoe, J. Frederick, West Hackney.
Clark, William, Hampstead.
Corbould, H. Francis, Thornton-heath.
Elliot, E. A. Savage, Kingsbridge, Devon.
Ford, L. Frederick, Highgate.
Hendley, John Lupton, Dover.
Hockin, George Treverno, Beckingham.
Hoets, Alton Kingsley, L.S.A., Adelaide-road.
Hills, A. Phillips, Battersea.
James, Charles Alfred, Plymouth.
Jones, A. C. Brett, Lavender-hill.
Morris, E. F. Griffith, L.S.A., Hereford.
Newnham, W. H. Christopher, Wolverhampton.
Lloyd, Rickard William, Wood-green.
Stansby, Charles John, L.S.A., Hoxton-street.
Steeves, George Walter, Liverpool.
Taylor, Henry Herbert, Lewisham.
Wakefield, Horace, Alwyne-place.

The following gentlemen were admitted Members on the 23rd inst.:—

Acland, Theodore Dyke, L.R.C.P. Lond., Oxford.
Batterbam, John Williams, Haverstock-hill.
Coronado, Daniel Entrique, M.D. Paris, Columbia.
Lane, Alexander, Bishop's-castle, Salop.
Milnes, George Hutchinson, Turnditch, Derbyshire.
Phipps, E. V. Ayre, Husbands Bosworth.
Pizey, G. F. Price, Clevedon, Somerset.
Risk, E. J. Erskine, Plymouth.
Street, Alfred Francis, M.B. Cantab., Whittlebury, Towcester.
Tucker, Joseph, L.S.A., Chulmleigh.
Westcott, Sinclair, Plymouth.
Wilson, George John, Brixton.

The following gentlemen were admitted Members on the 26th inst.:—

Barnes, George Frederick, Weymouth.
Chitty, Alfred Goldney, Dedham, near Colchester.
Duncan, Duncan, Buckingham-palace-road.
Fenton, H. A. Hill, Cumberland-street.
Grayling, Arthur, Forest-hill.
Lerew, Frederick William, Maida-vale.
Quicke, William Henry, L.S.A., Brixton-road.
Richardson, Richard Tippetts, L.S.A., Hackney.
Silk, J. F. William, L.S.A., Gravesend.
Terry, Henry George, L.S.A., Mells, Frome, Somerset.
Weston, George Edward, L.R.C.P. Edin., Bognor, Sussex.
Wood, Edward Archer, Marlborough.

The following gentlemen were admitted Members on the 27th inst.:—

Clarke, Ernest, Hampstead.
Clarke, William Jenner, L.S.A., St. Augustine-road.
Doyne, Robert Walter, Seymour-street.
Dobrashian, Gabriel Sukias, Constantinople.
Field, James William, Chesham, Bucks.
Howard, Eaton Clark, Devonshire-road.
Jackson, Mark, L.S.A., Great Torrington, Devon.
Jay, M. H. Hindmarsh, Adelaide.
Jessop, W. H. Hylton, B.A. Cantab., Vernon-street.
Nichols, Frederick Peter, B.A. Cantab., Bury-street.
Taylor, Thomas Percy, L.S.A., Bocking, Essex.
Volckman, Ronald, L.S.A., Upper Norwood.
Woodhouse, Tom Percy, L.S.A., Pontefract.

The following gentlemen were admitted Members on the 28th inst.:—

Battiss, William Sullivan, L.S.A., Southsea.
Bradshaw, O. G. Dix, Bath.
Burton, F. H. Merceron, Avenue-road.
Carpenter, Arthur Bristowe, Croydon.
Carr, Alfred Alexander, New Barnet.

Collins, William Job, Albert-terrace.
Hayward, John Davey, L.S.A., Liverpool.
Macnamara, Hugh Winckworth, Uxbridge.
Neumann, Joseph, M.D. Berlin, Bedford-square.
Shepard, Ernest William, Euston-road.
State, Alfred, Ockenden-road.
Thompson, Charles Emilius, L.S.A., Delamere-street.
Welch, George, Leamington.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on July 22nd:—

Barnes, Henry John, Thornhill-terrace.
Brown, James Grierson, Liverpool.
Dresser, Arthur Kinnaird, St. Oswald road, West Brompton.
Hughes, Thomas William, Royal Infirmary, Glasgow.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Wm. Oliver Tyndall Annesley, Greville Ewing Seon, and Alfred Geo. Clarke Pocock, St. Thomas's Hospital; Howard Bennett Fletcher, Sheffield School of Medicine; George Trevor Harley Thomas, St. George's Hospital; John Alex. Shaw, University College; John William Blampied, St. Bartholomew's Hospital; Michael Anthony de Quadros, Grant Medical College, Bombay.

COLLEGE OF PHYSICIANS IN IRELAND.—At the July examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—James Henry Beattie, Robert Ettingsall Beattie, George Harry Broadbent, Fanny Jane Butler, Alexander Cosgrave, Patrick Richard Dennehy, Augustus Newton Dickenson, Geo. Philip Elliott, William Henry Fitzmaurice, Hubert Flanagan, William Gibbon, William Frederic Gilbert, Henry Wilson Stocker Hall, John Hugh Harricks, James Kernan, John M'Cullagh, William Joseph Magee, Anthony H. Morgan, Patrick O'Donaghue, James Joseph O'Dwyer, William Renner, Samuel Sharpe, John Whittake Tate, Henry Clark Wilson.

MIDWIFERY.—James H. Beattie, Robt. E. Beattie, Geo. H. Broadbent, Fanny Jane Butler, Alexander Cosgrave, Hubert Flanagan, William Fredk. Gilbert, Henry Wilson Stocker Hall, John Hugh Harricks, James Kernan, John M'Cullagh, George Henry Manning, James Joseph O'Dwyer, William Renner, Samuel Sharpe.

The undermentioned were admitted Members of the College on the 9th inst., the names being arranged in order of seniority:—

Henry Gray Croly, Charles H. Robinson, Richard Warren Pendleton, Charles Trussell Bridgford, Robert R. King Elmes.

DR. REID, jun., of Ellon, has been elected President of the Buchan Medical Society for the ensuing year.

THE Visitors for the Isle of Ely and the County and Borough of Cambridge have determined to appoint an assistant medical officer for the county lunatic asylum.

ST. STEPHEN'S GREEN, Dublin, which has been beautified and improved by Lord Ardilann at a cost of £20,000, was opened to the public on last Tuesday, the 27th instant.

THE salary of Mr. James Allen, L.R.C.P. Edin., M.R.C.S. Eng., Medical Officer of Health to the Bollington Urban Sanitary Authority, has been increased from £10 to £20 a year.

DR. DIXON has been presented by the nurses of the Newcastle-on-Tyne Infirmary with an elegant silver-mounted decanter, as a mark of esteem, on his resignation of the senior house-surgeoncy of the institution.

H.R.H. THE PRINCESS CHRISTIAN has consented to open the Herts Convalescent Home on the 21st October. The new institution is intended to accommodate 44 patients. About £1500 is still required to meet the entire cost of the building.

THE vicar and churchwardens of Temple parish, Bristol, have consented to the opening, as a garden, of a burial-ground long unused for interment and closed against the public. This is a step which should be taken in other parishes similarly circumstanced.

MR. R. NUNN, surgeon to H.M. Prison at Warwick, destroyed himself on Sunday by taking a dose of prussic acid. Deceased, who was very much esteemed in the borough, is stated to have been overworked lately, and finally his mind gave way.

TRINITY COLLEGE, DUBLIN.—The Council have recently adopted a resolution, in addition to that passed in May last, by which certificates in ophthalmic surgery will not be accepted from any hospital that does not maintain permanently fourteen beds for ophthalmic cases only.

MR. T. T. LINART, late Medical Officer to the First District of the Bedminster Union, has been awarded a superannuation allowance of £80 a year. Mr. John Vance, late medical officer for the Plaistow district of the West Ham Union, has received a similar allowance of £30 a year.

A BAZAAR on a grand scale was held last week on the grounds of Easthill House, Colchester, the residence of Mrs. Round, in behalf of the funds of the Essex and Colchester Hospital. It is expected that the proceeds, when the accounts are made up, will prove to be very large.

MR. GEORGE CROOM ROBERTSON, M.A., Professor of Logic and Philosophy of Mind, University College, London, has been appointed one of the External Examiners of the New Victoria University, as has also been Mr. James Bryce, D.C.L., M.P., Regius Professor of Civil Law, Oxford.

AT the annual meeting of the supporters of the General East-end Tradesmen's Association in aid of the London Hospital, it was announced that the amount of subscriptions in behalf of the Association showed an increase on that usually received. A total number of thirty-two life governors had been made out of the funds of the society.

ADELAIDE HOSPITAL, DUBLIN.—The following prizes have been awarded at the termination of the session 1879–80:—Senior Surgical prize: Messrs. Cuppaige and Polden (equal). Junior Surgical prize: J. H. Scott. Senior Medical prize: Messrs. Hull and Polden (equal). Junior Medical prize: F. W. Elsner. Obstetrical prize: T. C. Moore.

CITY OF DUBLIN HOSPITAL.—The directors of this hospital, having incurred a debt of £1951 for improvements, &c., during the last few years, made an appeal a few months ago for funds to defray the amount. This has been liberally responded to, and £1347 has already been received, leaving a balance due of some £600, which it is expected will shortly be obtained.

IT is to be regretted that the Woolton Convalescent Institution is, like many medical charities at the present time, suffering from want of funds. At the annual meeting of the friends of the Home, held on the 17th inst., the report read showed a balance of expenditure over receipts of £260. The chairman, however, mentioned a gratifying fact—viz., that many of the substantial subscriptions to the funds of the institution were from societies connected with the artisan class.

ACCIDENTS IN MINES.—The Home Office has just issued the annual reports for 1879, presented to the Home Secretary by the Inspector of Mines. The summaries show that during the year 1879 the aggregate number of persons employed in and about the whole of the mines in the United Kingdom of Great Britain and Ireland amounted to 523,870 persons. Of these 476,810 were employed under the Coal Mines Regulation Act, and 47,060 under the Metalliferous Mines Regulation Act. The total number of fatal accidents was 843, and the total number of deaths occasioned thereby 1037, showing a diminution compared with the totals for 1878 of 39 in the number of fatal accidents, and of 453 in the number of lives lost.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

CARRINGTON, R. C., M.D., M.R.C.P., has been appointed Visiting-Physician to the *Dreadnought* Seamen's Hospital at Greenwich, vice Dr. C. H. Ralfe, F.R.C.P., resigned.
CORDY, H., M.D., M.Ch., has been appointed Assistant-Surgeon to the North Infirmary, Cork.
CORKE, C. A., L.F.P.S.G., L.S.A.L., has been appointed Medical Officer for the Baschurch District of the Ellesmere Union.
CULLING, J. C., M.R.C.S.E., has been appointed Resident Medical Officer to Charing-cross Hospital.
DAVIES, D. W., M.D., C.M., has been appointed Medical Officer for the Llanharran District of the Bridgend and Cowbridge Union.
FRASER, J., M.D., L.R.C.P.I., L.R.C.S.Ed., has been appointed Physician to the Toronto General Hospital.
GRIKIE, W. B., M.D., F.R.C.S.Ed., L.R.C.P.I., has been appointed Consulting Physician to the Toronto General Hospital.

GRIMWOOD, H. C., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the First District and the Workhouse of the Pontefract Union, vice Simpson, resigned.

HININGS, J. W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator of the Knightwick District of the Martley Union, vice Mr. David Holmes, resigned.

HUGHES, T. J., M.D., M.R.C.S.E., has been appointed Medical Officer for the West Woolwich District of the Woolwich Union.

JACKSON, G., F.R.C.S.E., has been appointed Honorary Surgeon to the Plymouth Public Dispensary, vice W. B. Stephens, M.R.C.S.E., resigned.

JONES, T., M.B., F.R.C.S.E., has been appointed one of the Honorary Surgeons to the Manchester Royal Infirmary, vice Bradley, deceased.

MCCLURE, H., M.D., M.Ch., has been appointed Medical Officer for the First District of the Romford Union.

MAKINS, G. H., F.R.C.S.E., has been appointed Dispensary Surgeon to the Sailors' Dispensary, Well-street, London Docks, which will be opened in connexion with the *Dreadnought* Seamen's Hospital, Greenwich, in September next.

MOORE, H. C., M.B., has been appointed House-Surgeon to the Lancaster Infirmary and Dispensary, vice Collis, L.K.Q.C.P.I., resigned.

MURISON, J. F., M.B., C.M., has been appointed Medical Officer for the Parish of Cumbernauld, Dumbartonshire.

NICHOLSON, A., L.R.C.S.Ed., L.F.P.S.G., has been appointed Medical Officer for the First District of the Hunslet Union.

O'SULLIVAN, S., M.D., M.Ch., L.R.C.S.Ed., has been appointed Visiting Surgeon to the North Infirmary, Cork.

PHILLIPS, J. W., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Cowbridge District of the Bridgend and Cowbridge Union.

RYERSON, G. S., M.D., L.R.C.S.E., has been appointed Surgeon to the Mercer Eye and Ear Infirmary, Toronto General Hospital.

SHEAF, C. A. E., F.R.C.S., M.R.C.P., has been appointed Medical Officer to the Board of Trade for the Port of Barrow-in-Furness.

SHEARD, C., M.R.C.S.E., has been appointed Pathologist to the Toronto General Hospital.

SLOMAN, S. G., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the South District of the Farnham Union.

SOUTHAM, F. A., M.A., M.B., F.R.C.S.E., has been appointed Honorary Assistant-Surgeon at the Manchester Infirmary, vice T. Jones, M.B., F.R.C.S.E., appointed Hon. Surgeon.

STEAD, Mr. J. E., has been appointed Public Analyst for the Borough of Middlesbrough. £10 10s. per annum and fees.

WARE, J. W., M.R.C.S.E., L.R.C.P.L., has been appointed House-Surgeon to the North Devon Infirmary, vice Kay, resigned.

WATSON, G. S. M.B., C.M., has been appointed Medical Officer for the Thaxted District of the Danmow Union.

WORRALL, Mr. R., has been appointed Medical Officer for the Workhouse of the West Derby Union, vice W. B. L. Langley, deceased.

Births, Marriages, and Deaths.

BIRTHS.

BAKER.—On the 24th inst., at The Rectory, Hargrave, Northamptonshire, the wife of Surgeon-Major T. Young Baker, A.M.D., of a daughter.

DARLEY-HARTLEY.—On the 26th ult., at East London, Cape Colony, the wife of W. Darley-Hartley, M.R.C.S., L.R.C.P., of a daughter.

MANDERS.—On the 22nd inst., at Agincourt House, Yorktown, the wife of Horace Manders, F.R.C.S., of a son.

PHILLIPS.—On the 13th inst., at Woodville, New Ferry-park, Cheshire, the wife of Ed. J. M. Phillips, M.R.C.S.E., L.D.S., of a son.

RENSHAW.—On the 21st inst., at School-road, Sale, Cheshire, the wife of Israel J. E. Renshaw, of a daughter.

ROOSE.—On the 22nd inst., at Regency-square, Brighton, the wife of Robson Roose, M.D., F.R.C.P., of a son.

SMITH.—On the 25th inst., at Caistor, Lincolnshire, the wife of Tom Smith, M.R.C.S.E., L.R.C.P., of a daughter.

THORNTON.—On the 24th inst., at 83, Park-street, Grosvenor-square, W., the wife of J. Knowsley Thornton, M.B., C.M., of a daughter.

MARRIAGES.

BIDEN—JONES.—On the 28th inst., at St. Cybi's, Holyhead, by the Rev. Morris Jones, B.A., William Price Biden, M.R.C.S.E., of St. Mary's-road, Peckham, and Hyères, France, to Ellen Elizabeth Jones, of Plymnon y Gorlas, Holyhead.

COUPLAND—POTTER.—On the 27th inst., at St. Andrew's, Bath, by the Rev. Prebendary Anderson, A.M., Sidney Coupland, M.D., F.R.C.P., of Weymouth-street, Portland-place, third son of the late W. N. Coupland, of Streatham, to Bessie, youngest daughter of the late Thomas Potter, of Great Bedwin.

GROVES—AUGERAUD.—On the 22nd inst., at St. Mary Abbotts, Kensington, by the Rev. T. J. Williams, Rector of Waddesdon (cousin of the bride), assisted by the Hon. and Rev. E. Carr Glynn, Vicar of the Parish, and the Rev. H. Hulcatt, late Chaplain to the Forces (First Class), and Vicar of St. John's, Bethnal-green, James William Groves, of King's College, London, and Russell-square, to Mary Julia Nelly, daughter of the late William J. P. Augeraud, Esq., and step-daughter to H. L. Harper, Esq., of 19, Addison-road, Kensington.

HOBSON—ARMITAGE.—On the 27th inst., at St. Martin's, Scarborough, by the Rev. James Hope, M.A., of Holy Trinity, Halifax, assisted by the Rev. C. G. Foster, M.A., Lewis John Hobson, M.B. Lond., B.S., F.R.C.S., of Scarborough, to Frances Vernon, youngest daughter of the late George Armitage, Esq., J.P. & D.L., of Milnsbridge House, Huddersfield, and Nunthorpe, York.

KAY—THOMPSON.—On the 22nd inst., at Newport Parish Church, Barnstaple, North Devon, William Kay, M.R.C.S.E., L.S.A.L., of Barnstaple, to Mary Ellen (Lillie), elder daughter of the late Isaac Thompson, J.P., of Workington, Cumberland.

DEATHS.

CARTER.—On the 25th inst., at 60, Wimpole-street, after lingering illness, Helen Ann Beauchamp, the beloved wife of Robert Brudenell Carter, aged 48. Friends are requested to receive this intimation.

GREIG.—On the 18th inst., at Sunnyside, Fyvie, A. F. Greig, M.R.C.S.E., aged 65.

PEARSE.—On the 24th inst., at Penzance, John Pearse, Surgeon, late of Tavistock and Wisbech, aged 65.

PHELAN.—On the 23rd inst., at his residence, Grove-road, Rock Ferry, Cheshire, William Bernard Phelan, L.R.C.P.E., L.R.C.S.E., &c.

TREVAN.—On the 18th inst., at Padstow, Henry Trevan, F.R.C.S.E., Fleet-Surgeon, R.N. (retired).

WALSH.—On the 24th inst., at Whitechurch, near Dublin, Albert J. Walsh, F.R.C.S.I.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, London.

The Nature and Treatment of Syphilis. By C. R. Drysdale, M.D. Fourth Edition. pp. 172.

CHURCHILL, J. & A., London.

Practical Lithotomy and Lithotrity. By Sir H. Thompson, F.R.C.S. Third Edition, considerably enlarged. pp. 304. With Engravings.

The Riviera. By E. I. Sparks, M.A., M.B. pp. 403.

Medical Education and Practice in all Parts of the World. By H. J. Hardwicke, M.D. pp. 209.

FIELD & TUER.

Journals and Journalism. By John Oldcastle. pp. 141. 3s. 6d.

LONGMANS, GREEN, & Co., London.

Elements of Chemistry. By W. Allen Miller, M.D. Revised and in great part Rewritten by H. E. Armstrong, Ph.D., and C. E. Groves, F.C.S. Part III.: Chemistry of Carbon Compounds. Fifth Edition. pp. 1044. Illustrated.

Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S. Ninth Edition, with an Introduction by F. Holmes, M.A. pp. 802. With Engravings.

An Introduction to Logic. By W. H. S. Monck, M.A. pp. 259.

Modern France. By Oscar Browning. pp. 136.

Introductory History of England. By W. M. Lupton. pp. 64.

A Familiar History of Birds. By the late E. Stanley, D.D., F.R.S. New Edition. pp. 416. With Engravings.

MACLACHLAN & STEWART, Edinburgh.

The Dissector's Guide: Abdomen. By D. J. Cunningham, M.D. pp. 329. With Engravings.

MACMILLAN & CO., London.

Sanitary and Social Lectures and Essays. By Charles Kingsley. Vol. XVIII. pp. 300.

On Aneurism, especially of the Thorax and Root of the Neck. By R. Barwell, F.R.C.S. pp. 118. With Illustrations.

PUTNAM'S SONS, New York.

Contributions to Orthopædic Surgery. By Dr. J. C. Hutchison. pp. 121. With Engravings.

SANITARY INSTITUTE OF GREAT BRITAIN.

Report of the Third Congress of the Sanitary Institute of Great Britain. Edited by H. C. Burdett and F. de Chaumont, M.D. pp. 392.

WATTS & Co.

Life and Mind, on the Basis of Modern Medicine. By R. Lewins, M.D. Edited by "Thalassoplektos." pp. 72.

WYMAN & SONS, London.

Professional Bookkeping. By W. J. Gordon. pp. 96.

A Reply to Criticisms on "The Problems of Insanity"; what Constitutes a Discovery in Science. By Dr. G. M. Beard. (New York.)—Alcohol Tables. By O. Hehner, F.C.S.—Notes of a Case of Rare Form of Elephantiasis. By D. T. Playfair, M.B. (Oliver & Boyd.)—Annual Report of the Royal Edinburgh Asylum for the Insane.—Annual Report of the Committee of Management of the Hospital for Sick Children.—The Educational Treatment of Incurably Deaf Children. By W. B. Dalby, F.R.C.S. (Churchill.)—Journal of Anatomy and Physiology, Vol. XIV. (Macmillan).—Revue des Sciences Médicales. No. XXXI.—The Anglo-American Practical Guide for the Continent of Europe.—Den Miasmatiskt-kontagiösa Lungsotens. Af Dr. F. Eklund.—A New Eye Bandage. By Dr. S. Theobald.—Hydro-Incubation. By T. Christy, F.L.S.—Archiv für Pathologische Anatomie und Physiologie. Herausgegeben von Rudolf Virchow.—Brain. No. X.—American Journal of Medical Sciences, July.—The Therapeutic Gazette, June.—Victorian Review, June.—Fourth Annual Report of the Managers of the Morristown Asylum.—Australian Medical Journal, April and May.—Una Parola intorno alla Patogenesi della Epilessia; lettera del Prof. Vincenzo Chirone all' esimio L. Luciani.—Canadian Journal of Medical Science.—The Improved District Railway Map. (Adams & Son.)—Twentieth Annual Report of the Burnwood House Hospital for the Insane.—Rules and Code of Etiquette of the Manchester Medico-Ethical Association.—Ataxie Locomotrice et Lésions Cardiaques. Par le Dr. J. Grasset.—Elementary Education at Home and Abroad; a Lecture by A. Sonnenschein.—On the Mode of Healing in Wounds under Antiseptic Dressings. By Dr. David Foulis.—The Irritable Bladder in the Female. By Dr. Oppenheimer.—Estudio en que se Trata de Esclarecer y Demostrar las Verdaderas Funciones de la Próstata. Por el Dr. José Torres Matos.—The Dental Jairus, July.

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, July 29th, 1880.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radiation in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
July 23	30·01	W.	67	60	107	78	57	..	Fine
,, 24	29·92	W.	66	60	105	73	57	..	Fine
,, 25	29·84	S.W.	69	67	116	81	53	..	Fine
,, 26	29·58	S.W.	63	61	103	71	53	0·47	Raining
,, 27	29·79	W.	65	61	114	77	58	0·38	Cloudy
,, 28	29·79	S.W.	65	61	92	70	60	..	Cloudy
,, 29	29·54	S.W.	65	62	111	75	60	0·12	Cloudy

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Local papers containing reports or news-paragraphs should be marked.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Lectures, original articles, and reports should be written on one side only of the paper.

We cannot prescribe, or recommend practitioners.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

"CRUELTY TO WOMEN."

WE are about to reissue our list of houses of business at which seats are, or will shortly be, provided for women serving behind counters and in show-rooms. Firms desiring to be included in the same will please to communicate.

DRINK FOR RAILWAY TRAVELLERS.

AT some of the stations on the principal railways outside London, what is called "iced water" is provided and handed round—or perhaps we ought to say hawked about—in wire baskets. The idea is a good one, but could not the companies be generous enough to *give* their customers a few glasses of cold water? There need be no great trouble or expense in the matter. The water need not be actually *iced*; it is not now—or if it has been, that must have been some time ago. The jugs from which the dirty little boys playfully fill up the dregs left in dirty glasses by those consumers who are not so thirsty as to drink every drop, do not stand in a refrigerator, but on a table or bench somewhere on the platform, and sometimes of course in the sun. The only drawback we foresee to the plan proposed—namely, that the companies should take the business in their own hands—is, that the lessees of refreshment-stalls might ask to have their rents reduced. There need not be any haste in this respect. By continuing the practice of serving out water a little longer as it is now conducted, the public will be sufficiently disgusted to fall back on the old-fashioned seltzer with a drop of "something" in it. The "'ow much I" ejaculated by each dirty little boy, as he sees one of his colleagues sell a glass of "iced water," draws attention to the matter, and the manner in which the glass is seen to be filled up from a tepid solution of dead flies is not appetising.

Dr. Irving.—We gave our correspondent an opportunity of defending himself against the statements made with regard to the administration of the General Hospital, Calcutta; but we cannot accept him as the self-constituted champion of Dr. D. B. Smith in our columns, more especially as he bases the defence on his impressions, and comments upon the report of a Committee appointed so far back as 1870; nor do we think it necessary to obtain, as he suggests, "from the Government of Bengal a copy of Dr. Smith's unpublished otter."

Mr. R. T. Tickling.—The treatment alluded to is practised, and in some cases with success. We would recommend consultation with a good general surgeon, who could probably suggest more suitable treatment.

July, 1880.—The charge for the stamp for the Membership or Fellowship of the College *ad eundem* is 20*s*.

Dr. A. H. Benatt.—The paper will appear in an early number.

ACUTE RHEUMATISM TREATED BY HOT WASHING-SODA BATHS.

IN the *Australian Medical Journal* for April, two cases of acute rheumatism treated by hot washing-soda baths are reported by Mr. Bingham Crowther, L.R.C.P., as occurring under the care of Dr. E. L. Crowther. In this treatment the patients are taken in a blanket by the four corners, and lowered down in a recumbent position into the bath. Half a pound of common washing-soda is added to the water as hot as can be comfortably borne, the patient remaining in from ten to fifteen minutes, then lifted into a dry warm blanket, and replaced in bed. According to the reporter, profuse diaphoretic action follows along with diuresis, to the immediate relief of the sufferer, pains rapidly depart, and sleep follows the use of the remedy. In one severe case convalescence was effected in eleven days. The other case was treated without permanent benefit with salicylate of soda and various sedatives and salines. On the 25th of December, 1879, "the patient becoming immovably fixed in bed by the affection of new joints, and all remedies proving useless, the washing-soda bath was tried as a last chance. After remaining in ten minutes he was removed. His complexion soon changed from a muddy to a natural colour, and the pains left the joints." On the 27th there remained only a little aching in the body and slight pain in the left wrist. Complete recovery having been established on the 8th January, the baths were discontinued.

Mr. James T. R. Davison.—We do not know.

DR. TANNER'S FAST.

To the Editor of THE LANCET.

SIR,—It may interest some of your readers to know that some five years ago I attended a lady over sixty years of age who suddenly refused food in every shape and form. I never found out the reason why she did so, but I fancy it was owing to some family trouble. Be this as it may, she lived for exactly seven weeks, and died on the forty-ninth or fiftieth day, during the whole of which time she took nothing but cold water—at first freely, but gradually in smaller quantities—with one exception of a dessertspoonful of brandy in water, which was never repeated. All offers on my part to force food with the stomach-pump or enema were steadily refused by patient and friends. They were people in a good position, and there was no reason for deception of any kind; in fact, most of the friends are still alive, and if any member of the profession would like to sift this case I shall be happy to give him every facility for so doing. I may mention that the lady in question was always remarkably quiet in manners and very taciturn, seldom, when quite well, speaking unless in reply to some question. She was also very stout, and some few years earlier I had operated upon her for strangulated umbilical hernia, from which she recovered without a bad symptom; and at the time of her death, although her legs and arms had become very thin, her body retained much of its previous stoutness.

I am, Sir, yours, &c.,

July 27th, 1880. M.D.

To the Editor of THE LANCET.

SIR,—As a considerable amount of attention is just now called to the possibility of protracting life for a lengthened period without food, perhaps the following case may be worth notice:—

R. G——, a man of spare build, very recently deceased, had been under my care for the last three years. For some time past his occupation was that of gardener, until constantly recurring pains and weakness obliged him to relinquish all work. Without going into particulars I may state that his disease was cancer of the stomach. For forty-one days before his death he took no food of any kind, either liquid or solid, merely moistening his lips from time to time with water. For four months previously the amount of nourishment in any shape of which he partook, might be contained in an ordinary breakfast cup. His wife assures me—and I have no reason to doubt the truth of her statements—that during the previous twelve months he would only take a morsel of food once in every two or three days, as the agony he suffered after receiving anything into his stomach made him so dread its renewal that he would remain without food till forced by sinking and weakness to take some further nourishment.

There was great emaciation for a considerable time before death, but he was perfectly sensible to within twelve hours of his decease, could speak in a whisper, and knew those around him.

I am, Sir, yours, &c.,

Meadowside, Putney, July 26th, 1880. G. STANLEY MURRAY, M.D.

Only a Provincial Fellow should write to the Honorary Secretary, Mr. B. T. Lowne, F.R.C.S. The following list of provincial Fellows who have been Chairmen of the Fellows' festival will, no doubt, be found correct:—In 1847, Mr. J. S. Soden, of Bath; 1849, Mr. J. Hodgson, of Birmingham; 1851, Mr. J. H. James, of Exeter; 1853, Mr. Wilson, of Manchester; 1855, Mr. Norman, of Bath; 1857, Mr. Smith, of Leeds; 1859, Mr. T. Paget, of Leicester; 1861, Mr. J. Wickham, of Winchester; 1863, Mr. T. Turner, of Manchester; 1865, Mr. P. C. De la Garde, of Exeter; 1867, Mr. T. Green, of Bristol; 1869, Mr. T. Nunneley, of Leeds; 1871, Mr. H. D. Carden, of Worcester; 1873, Professor Humphry, of Cambridge; 1875, Surgeon T. Longmore, of Netley, Southampton, as representing the Army; and 1877, Mr. E. L. Hussey, of Oxford.

W.—We do not reply to questions unaccompanied by name and address.

LUNACY IN IRELAND.

IT appears from the recently issued report of Irish Lunatic Asylums for the past year that there has been an increase of 234 in the number of insane over that of the preceding year; but the Commissioners, bearing in mind the fact that from the unbroken severity of the last winter and the destitute condition of whole counties throughout Ireland for many months, most of the imbecile and idiotic were forced to seek shelter in workhouses, infer that the total 12,819 not only supplies a very fair estimate of the actual amount of insanity in Ireland in its various forms, but affords evidence that the disease cannot be regarded as really on the increase. During the past year, 2392 were admitted into district asylums, of which number 1955 were cases of a first attack and 438 of relapses, the comparatively large number of the latter indicating a marked difference between the liability of a recurrence of disease in mental and physical affections. Of the 10,800 under treatment in district asylums, 1004 were sent out recovered, being at the rate of 42 on admissions, and not quite 10 on the whole number under treatment; 245 were improved, and 105 unimproved. The mortality amounted to 949, being equal to a death-rate of 8¼ on the entire number in asylums, the increase being due to the harshness of the weather and the prevalence of bronchial diseases. Two of the deaths were accidental and one suicidal; and when we learn that upwards of 1300 lunatics were committed as dangerous or violent, the result is very gratifying. Of 8490 resident in district asylums on the 1st of last January, 1861 were married, 467 widowers or widows, 5816 single, and in 346 instances the social condition was unknown. This discrepancy between the number of married and single inmates is remarkable, and is totally at variance with what is elsewhere recognised.

Mr. M. Ball.—The communication has been received, and will be inserted as early as our arrangements will permit.

THE INDIAN MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—Please allow me space in your columns to inform intending candidates for competition for the Indian Medical Service that three of the men who took the highest places at examinations within the past three years have petitioned for transfer to the Army Medical Department, owing to the changes in their position and prospects under the late orders of the Government of India. More may have petitioned, but I know of three for certain, and it is only fair that candidates should be aware of the way that juniors look at the present position of their service before they find themselves in the same predicament. It has been a source of great disappointment and regret to our service to find THE LANCET, to whom we naturally looked for support in our struggle for fair play and justice, should have so misunderstood our case as to present to the public and the profession such a one-sided view of the points at issue; and, in the interests of common justice and fairness, I claim the publication of this protest against the idea put forward of there being either jealousy or animosity on the part of our service against the A.M.D. Nothing that has issued from our Defence Committee can be construed to bear such a meaning, though an occasional member of the service, smarting under the sting of injustice and degradation, may have written in a strain which he would himself be the first to regret in cooler moments, and I would assure our A.M.D. brethren that we repudiate all such ideas or intentions. They have succeeded in obtaining some crumbs of justice. No one considers they have obtained all they ought to have.

Now, all we claim is equality in our especial sphere of service. We do not see why 280 Bengal medical officers should be subordinated to 185 A.M.D. officers; the latter number being the war establishment of the A.M.D. in Bengal; in times of peace the number would be about 150 or so. You will reply, "Some of your men are under the civil department." True. But we are all military commissioned officers, and not civil officers, and are merely temporarily in civil employ, liable to be sent to military duty at any moment, and our promotions, pensions, and chance of honours or distinctions are all dependent on military service. Not a medical officer in civil employ has obtained a decoration or honour of any sort or kind in all Bengal! or I believe in all India, so that we are now practically and theoretically a subordinate branch of the A.M.D. So much then for our position; that is unquestionable.

As regards our prospects, which you assert have been improved, I would merely state facts. In 1860 there were seventeen administrative appointments (including a Director-General) in Bengal, which we could all look forward to as the reward of good service when our turn came. At the present moment there are three deputy surgeon-generals in the military department, for whom have been reserved the very worst and most unhealthy stations in Bengal, and on whose shoulders has been placed all the miscellaneous work of the Government, as gaols, sanitary, civil dispensaries, &c. &c. In the civil department there is one surgeon-general and sanitary commissioner combined, and four deputy surgeon-generals. Were the old and just rules of seniority and selection in force in this department, we could look forward perhaps to promotion in this line; but the two first promotions under the new rules have been from the grade of surgeon-major, superseding every administrative officer in the service, and in both cases, in defiance of the hitherto unviolated rule, that officers who had once refused promotion, were not eligible in future. When such men as Deputy-Surgeons-General Christison and De Renzy—both men of acknowledged administrative skill and experience—were passed over, what can we hope for in future? What guarantee have we that the junior surgeon in the service, if he can only gain the ear of some local Lieutenant-Governor or the Viceroy, may not be appointed civil surgeon-general and sanitary commissioner? We have positively none, and will you, Sir, still say that our prospects are improved?

As regards the prospective promotion of the three sanitary commissioners to the privileges of deputy surgeon-generals. In the first place, they already draw the pay of a deputy surgeon-general, so there is no gain pecuniarily; they gain nothing in rank, except that their former commissions are to count from date of promotion, and not junior of that grade to the whole army, the Army Medical Department included; so the sole advantage lies in the pension of £250 extra. But how many of the sanitary commissioners will get it, and in what time? No sanitary commissioner since the post was created some fifteen years or so ago by Sir John Lawrence, as he was then, has yet retired as such, the Bengal and Punjaub men having gone into other and more congenial appointments, as colleges &c., and Dr. Planck, the sanitary commissioner of the N.W.P. will have served as sanitary commissioner nineteen years before he can claim the pension of a deputy surgeon-general. Further, there is nothing to prevent any local Government appointing a military man or a competition wallah as sanitary commissioner, as has been done before, and the new rules in no way make the appointment a purely medical one. Under these circumstances I may, I think, be excused if I fail to see any reason for being grateful to Government. When the sanitary commissioners are ordered to be chosen from amongst the deputy surgeon-generals, I will admit the advantage; and when the latter are appointed for long service and efficiency, I may also be able to see some advantage in that line; but as long as they are the reward of toadyism, I cannot either look forward to the post or respect the incumbent.

I admit fully the absurdity of the late double administration. But why not have adopted the rule that has been adopted in the military commands—viz., every alternate man to be chosen from each service, and no distinction of stations to be observed? Or why not adopt the same ruling as in the Artillery and Engineers—equitable amalgamation! We are all proud of our service hitherto, and for this reason prefer to see it abolished to being degraded to a subordinate position under another service, whose members are less than half of ours, and whose standing is in no way superior. Again, let me repeat, we only ask for equality, and till that is granted, in a way, too, that cannot be set aside, let English and Irish students beware of how they put the yoke on their own necks.

I am, Sir, yours faithfully,

July 20th, 1880. DISAPPOINTED.

*** We have received a note from the writer of the preceding letter, in which he informs us that, "if we [i.e., the Indian medical officers] fail, our service will attribute the failure to you chiefly, for the whole weight of your influence has been thrown into the scale against our obtaining our reasonable demands." Of this threat we will say nothing more than that we differ from the writer in his opinion as to what are *reasonable* demands. He admits the necessity for getting rid of the double administrative staff, but would like to retain half of the military appointments and to obtain all the new civil ones. We have considered it reasonable if the Indian Medical Department gets back a share, as it desires, of the military administrative appointments, that the British Medical Department should receive some compensation in the form of a share of the new civil ones, which were created to make up for the loss of the others. We do not think it reasonable that the British should lose more than half its administrative appointments without receiving anything in exchange, while the Indian should lose half and receive far more than an equivalent in the shape of lucrative civil appointments. In this respect we wish fair play to be given to both. We may add that on the same grounds we have always strongly advocated the revision of the scale of pensions for the Indian Medical Service, and the grant of rank and honours in it, to the same extent and on the same principle as in the British Medical Department.—ED. L.

LIMITED LIABILITY COMPANIES AND THE PHARMACY ACT.

OUR contemporary, the *Pharmaceutical Journal*, takes a moderate and sensible view of the recent decision of the House of Lords in favour of Co-operative Stores and other Companies being at liberty to carry on the business of a chemist and druggist, provided that they do such business through a person who is properly qualified and registered under the Pharmacy Act. It would be a monstrous thing if such a Company were permitted to carry on such a business without complying with the conditions of the Pharmacy Act. Chemists and druggists, under these circumstances, should have little difficulty in competing with stores and companies. The public will be always likely to prefer the local chemist to the distant store, unless there is some great and unwarrantable discrepancy in the charges.

A General Practitioner had better apply to the Secretary of the Brussels Graduates' Association, Dr. Pocock, 20, Golborne-road, Upper Westbourne-park, W.

ERASURE OF NAMES FROM THE MEDICAL REGISTER.

WE gather from our correspondents that the sharp application of the 14th section of the Medical Act, empowering the Registrar to write a letter of inquiry to any registered person, addressed according to the address in the Register, and in the event of receiving no answer within the period of six months from the sending of the letter, to erase the name of such person from the Register, is followed sometimes by much inconvenience and sense of hardship. It is most desirable, of course, to use all precautions for keeping the Register accurate; but the erasure of a name is a severe proceeding that should not be carried out till very strong evidence calls for it.

X. Y. Z. has forgotten to enclose his card.

POISONING BY THE CYTISUS LABURNUM.

To the Editor of THE LANCET.

SIR,—At the Ophthalmic Hospital of the West London District School, at Ashford, there are from twenty to thirty cases of slight granular eyelids. On the 6th inst., at about 12.20 P.M., shortly before the dinner hour, a number of the children were playing in a grass-yard used as a recreation ground, where there are some trees, one of which is a young laburnum tree. This tree was the victim of an assault, being broken down, and seven of the children ate and swallowed some of its leaves. The reciprocation of the attack was not altogether anticipated by them. The ages of the children only varied a few months; they are from six years and a half to seven years and a half of age. The first symptoms that attracted the nurse's attention were faintness and pallor. Upon the nurse interrogating them they confessed to having eaten some leaves of a tree, which was verified by the ejections, which were those of the laburnum. At 12.30 the children were seen by me, all of whom were in the same ward, except an unusually stout child, whose symptoms were not alarming after a few doses of ammonia and brandy. Extreme pallor; stupor; drowsiness; a weak, faltering pulse; coldness of the body and extremities; vomiting a clear fluid, containing portions of the leaves, and dilatation of the pupil in each case were symptoms common to all seven. Emetics were not given; indeed, they were contra-indicated, as vomiting had already set in, and the depression was extreme in most of the cases. The only reliable subjective symptoms elicited were pain in the epigastrium and frontal headache. Brandy, ammonia, and hot water were freely administered, and at 1 P.M. six cases had recovered, except drowsiness and partially dilated pupils. One boy was still in a serious condition; he was cold, although artificial heat had been resorted to, as in the other cases. The pupils were dilated; the pulse-rate 45 per minute and feeble; sleepiness; distressing retching, and a generally cyanosed appearance. Stimulants were freely given, but were quickly rejected by the stomach; nevertheless, they were persevered with, and at 1.45 P.M. reaction had been well established. They all partook of bread-and-milk at 5 P.M. The interest in these cases is that the children poisoned are all of the same age, with a variation of only a few months; that the poison taken was certain; that the poison was taken when fasting; that there was no diarrhœa; that there were no convulsions, not in the most extreme case; that the poisonous action of the laburnum is of a depressant and not of a convulsive character; and that recovery or death occurs in about two hours.

I am, Sir, yours obediently,
PETER W. DE LA MOTTE, M.R.C.P. Edin., &c.

Staines, July 13th, 1880.

Surgeon, R.N.—Yes. M. Lucas-Championnière has, we believe, recently performed the operation more than once with successful results.

Dr. M'Call Anderson.—Soon.

TREATMENT OF SCALP WOUNDS.

To the Editor of THE LANCET.

SIR,—If you think the following notes sufficiently interesting for publication, would you kindly insert them, as a comment upon the remarks of a similar case detailed in THE LANCET of June 26th:—

Mrs. P. B——, an Irishwoman, aged sixty, was hanging clothes on the leads of her house. She fell a distance of forty feet into the yard of the adjoining house, striking in her fall the stone-sill of a scullery window. On arriving at the house, I found the patient perfectly conscious, with a large T-shaped wound, denuding the whole of the left parietal and occipital bones, the flaps of scalp covering respectively the left ear and the nape of the neck. After twisting two or three vessels and thoroughly cleansing the flaps, I inserted a thick wire suture at the junction of the two lines of wound, and applied very firm pressure with pads of dry lint and a bandage. This accident occurred on Nov. 12th, 1879. On the 14th the wire suture was removed. On the 20th, and therefore a week after the accident, the pad and bandage were removed. Union was perfect throughout. I saw one drop of matter in the course of my observation of the case—that was on the third day upon removing the suture. There was no œdema of face or bogginess of scalp.

Remarks.—The recovery was certainly remarkable; but I cannot attribute it to antiseptic dressings or the youth of the patient. I do attribute the result to hard and even pressure of the whole surface with dry dressings and non-interference for several days. Possibly something of the favourable issue of the case might be attributed to the nationality of the patient.

Yours truly,
FREDK. M. ROBERTSON, M.B., &c.

Colville-road, Bayswater, July 24th, 1880.

EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

THE following were the questions on Surgical Anatomy and the Principles and Practice of Surgery submitted to the 241 candidates at the final examination for the diploma of Membership of the above College on the 16th instant, when they were required to answer at least four out of the six questions, including one of the first two:—

1. Describe the relations of the thyroid body, and mention the various operations in which it may be directly or indirectly concerned.
2. Give a description of the fascia of the male perineum, and state the chief surgical inferences to be drawn from their anatomical arrangement.
3. Under what circumstances in injuries of the head would you consider trephining indicated? Describe the operation.
4. Describe the ordinary consequences of dissection wounds, and the appropriate treatment.
5. Give the clinical history of a case of caries of the tarsus, and describe the pathological changes which occur in the course of the disease and in the subsequent repair.
6. To what causes may converging strabismus be due? Under what circumstances would you consider an operation appropriate and how would you perform it?

The following were the questions on the Principles and Practice of Medicine submitted to the candidates on the following day:—

1. Discuss the morbid anatomy and symptoms of enteric fever, and state the chief clinical distinctions between it and tubercular meningitis.
2. What are the distinctive signs of the several diseases of the aortic and mitral valves? What are the consequences of mitral disease as regards (1st) the heart itself; (2nd) the pulmonary circulation and lungs; and (3rd) the general circulation together with the liver and kidneys?
3. Enumerate the officinal alkaloids and their several preparations. State whence they are derived, what are their physiological and medical properties, and what their doses.

VENTILATION OF HOT-AIR BATHS.

To the Editor of THE LANCET.

SIR,—In view of your seasonable warning in THE LANCET of June 5th, regarding the dangers from insufficient ventilation in Turkish baths, allow me to mention a mode of ventilation that, so far as I know, is, of all modes, the most simple, cheap, and effectual. It applies to baths heated by a stove burning within the room, as in the case of baths heated by means of Scriven's circular stove, now in general use. All that is required is to cause the air that feeds the stove to traverse the room, slowly but continuously, in order to reach it. Of course combustion cannot go on in the stove without a continuous supply of air containing a due amount of oxygen. If air from the outside were allowed to enter near to where the stove is placed, it would reach it by a direct short cut, and could do next to nothing to change the air in other parts of the room; but if the air could enter only, or chiefly, on the side of the room opposite the stove, and had consequently to traverse the room in order to reach it, the slow-moving current would carry with it the carbonic-acid gas from the bather's lungs, which is the chief impure gas to be got rid of. The minute openings required for the entrance of air should be high up in the walls, or, better still, in the roof. This prevents all sensation of cold draughts among the bathers. The air from the outside, even in summer weather, is colder, and consequently heavier, than the air in the bath. It quickly becomes partially heated by meeting the radiation from the stove, and by mixing with the hot air, already of a high temperature; but it is not rarefied so quickly as to prevent it from sinking slowly towards the floor, moving along which towards the stove it carries with it the carbonic-acid gas. It is obvious that this gentle movement must be continuous so long as the fire in the stove is kept up, and that the more energetically the fire burns, the better will the ventilation of the apartment be. It is equally obvious that roof ventilation cannot be depended upon for the removal of carbonic-acid gas, because, being heavier than pure air of the same temperature, it cannot ascend except in minute quantity, on the principle of diffusion of gases. Much has been written about the admission of pure air into rooms, and many seem to take for granted that, if provision is made for this, all will be right. The object, however, that should be most considered is the removal of the gas thrown off by the lungs, and provision must be made for this at as low a level as where the heads of the inmates are.

The principle I have mentioned is applicable to ordinary dwellings and to all places in which fire is kept burning. In building a house, or in buying or renting, a chief thing to be seen to is that the relation of the fire-place to doors and windows is such that the air that feeds the fire must traverse the apartment in order to reach it. Many otherwise excellent houses are faulty if judged by this principle; but anyone that bestows attention upon it must see at a glance its great importance.

Yours &c.,
July, 1880. A. M.

A DISCLAIMER.

To the Editor of THE LANCET.

SIR,—The *Bradford Chronicle and Mail* of June 12th, 1880, contained letter signed "A Woolsorter," in which my name was mentioned. I wish respectfully to state that I am utterly ignorant of its author, and that I have not in any way whatsoever had *anything* to do with its insertion.

I am, Sir, yours faithfully,
Heckmondwike, July 27th, 1880. FRAS. B. LEE.

A HAPPY TERMINATION.

THE *Canada Lancet* reports that a suit for malpractice in a case of arm fracture, in which damages for $10,000 were claimed, was recently instituted against two Baltimore surgeons. Dr. Wallis, one of the defendants, gave an account of the case and of its treatment so clear and convincing as to induce the plaintiff and the counsel to make a public apology and to withdraw the suit.

Secretary, Order of St. John.—The lecture was noticed in our last issue.

MEDICAL AND SURGICAL BED-DRESS.

To the Editor of THE LANCET.

SIR,—When writing some suggestions for a "Medical and Surgical Bed-dress," I was not aware that Dr. Thomas Joyce of Cranbrook had previously made a similar suggestion for "A New Form of Bedgown for Sickness," in the *Practitioner*. So far as the principle of our two communications is concerned, the original idea was clearly due to Dr. Joyce, and I hasten to acknowledge this. Had I known of Dr. Joyce's communication in time, I need hardly say I should have referred to it in my own "suggestions."

I am, Sir, yours &c.,
H. CRIPPS LAWRENCE, L.R.C.P. Lond.

Oxford-terrace, W., July 22nd, 1880.

A PRIZE FOR A "GOOD" MEDICAL ASSISTANT.

THE following letter to an applicant for an assistantship will be read with interest:—

"DEAR SIR,—Mr. —— desires me to say his terms are to good married man a permanency. Salary 30*s.* weekly, unfurnished house, gas down stairs (not up), 1*s.* in the pound commission instead of coal, increased to 2*s.* in the pound when 40*l* is reached. There is no midwifery nor bookkeeping nor nightwork. It is on the dispensary system, all ready money. He requires bond signing, and pays no travelling expenses. Mr. —— has a number of these places in ——. He will require reference as to sobriety &c. to last situation. I enclose you carte.

"Yours &c.,
"—— ——."

ERRATUM.—In Mr. Herbert Page's letter on Colour-blindness, page 152, line 23 from top, for "watching" read *matching*.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir W. Jenner, London; Mr. MacCormac, London; The Hon. W. F. Massey-Mainwaring; Mr. Tickling, London; Messrs. Schacht and Co., London; Major Sharp; Mr. H. C. Lawrence, London; Mr. Keyworth; Mr. Cobb, Hatham, N. Melbourne; Mr. Winter, Wolverhampton; Mr. Holmes, Meerut; Mr. Foster; Mr. Davison, Edinburgh; Dr. Thomas, Sheffield; Mr. Yeld; Mr. Kinloch; Mr. Knott; Mr. Cresswy; Mr. J. Michell, New York; H. Loffler; Mr. Burdett, London; Dr. Bodine, Trenton; Dr. Bantock; Mr. Ingils, Edinburgh; Dr. Sheen, Cardiff; Dr. Murray, Putney; Rev. J. J. Beresford; Dr. Sandford, Hereford; Dr. Savage, Birmingham; Mr. Lawton, Poole; Mr. S. Gamgee, Birmingham; Mr. Lee, Hockmondwike; Dr. Davy, Bristol; Dr. Maclaren, Edinburgh; Mr. Kelley, Shirley; Mr. J. D. Jones, Lee; Mr. Brown; Dr. Edwards; Dr. Smith, Aberdeen; Dr. Wise, Zurich; Dr. Fordown; Dr. Francis, St. Louis; Mr. Good; Major Keith; Mr. Bailey; Dr. Helme, Manchester; Mr. Whiteley, Leeds; Mr. Jackson; Mr. Thompson, Leamington; Mr. Brown, York; Mr. Norris; Dr. Buchanan, Glasgow; Mr. Vaughan; Mr. Roland; Mr. Biden; Messrs. Smith and Co.; Mr. Kirby; Mr. Stephenson; Mr. Bowen; Mr. Scott; Mr. Shepherd; Dr. Finch, Fisherton; Mr. Usher; Dr. Tetley, Keighley; Mr. Callant; Messrs. Knight and Co.; Mr. Stamford; Messrs. Harvey and Reynolds, Leeds; Dr. Eberle, Eastingwold; Mr. Teevan, London; Mr. Williams, Georgetown; Dr. M'Call Anderson, Glasgow; Mr. Tyrrell; Dr. Garner, Birmingham; Messrs. Brismead and Sons; Dr. A. H. Bennett, London; Mr. Saunder, Manchester; Dr. Weaver, Longton; Mr. Furlong, Enniscorthy; Mr. Bridgman, Barnstaple; Mr. Edmund Johnson; Mr. F. R. Greenwood; One of them; Coursor; H. F. S.; Ignoramus; A. B., Aberdeen; X. Y. Z.; A General Practitioner; Forceps; Alpha; J. H. W., Westbourne; Forceps; Statim; Reginaldus; Partner; L.S.A., L.F.P.S. Glas.; July, 1880; Chemist; J. M. S.; &c. &c.

LETTERS, each with enclosure, are also acknowledged from—Mr. Watson, Scarborough; Mr. Taylor; Mr. White; Mr. Ayton; Mr. Manders, York Town; Messrs. Clark and Co., Leicester; Mr. Pearse, Penzance; Mr. Jackson, Leeds; Mr. Fagg, Bradford; Messrs. Stickland and Rowe, Kensington; Mr. Calder, Liverpool; Dr. Cresswell; Mr. Manning; Mr. Miller; Mr. T. Smith; Mr. Exell; Dr. Watson, Sheffield; Mr. Hodgson; Dr. Laverick; Dr. Corner; Dr. Stuart, Hulme; Dr. Duncan, Huddersfield; Dr. Duke; Dr. Carter; Mr. Harrison, Liverpool; Mr. Newman; Mr. Woodham, Broughton-in-Furness; Miss Teague; Mr. Sample; Mr. Martin; Mr. Robinson, Chesham; Mr. De Fraine, Aylesbury; Mr. Letts, Spellsby; Dr. Smith, Highgate; Dr. Eaton Cleator Moor; Mr. Evans, Wrexham; Dr. Lister, Ashton; Mr. Fox; Mr. White, Bradford; Dr. Patterson, Windsor; Medicus, Manchester; B. A., Ireland; Medicus, Newcastle-on-Tyne; Midlands; Practitioner; E. J. D., Walsall; S. S., London; Q.; Medico, Selby; J. P.; Dentist Islington; Allan; A. W., Manchester; Medicus, Shepherd's-bush; Beta, Stoke Newington; Surgeon, Huddersfield; Medicus, Highgate W. L. J.; M. G., Swansea; Dr. H., Eccles; L. F. K.; &c.

Church of England Temperance Chronicle, Deutsche Medicinal-Zeitung, Citizen, Birmingham and Aston Chronicle, Canada Lancet, Melbourne Argus, Pharmaceutical Journal, Madras Times, Chemists' Journal, Englishman, New Zealand Herald, United Service Gazette, Sussex Pinsbury Park Journal, La Independencia Belica, Carlisle Patriot, Therapeutic Gazette, &c. &c., have been received.

Medical Diary for the ensuing Week.

Monday, Aug. 2.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

Tuesday, Aug. 3.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.

Wednesday, Aug. 4.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Aug. 5.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.

Friday, Aug. 6.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 7.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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